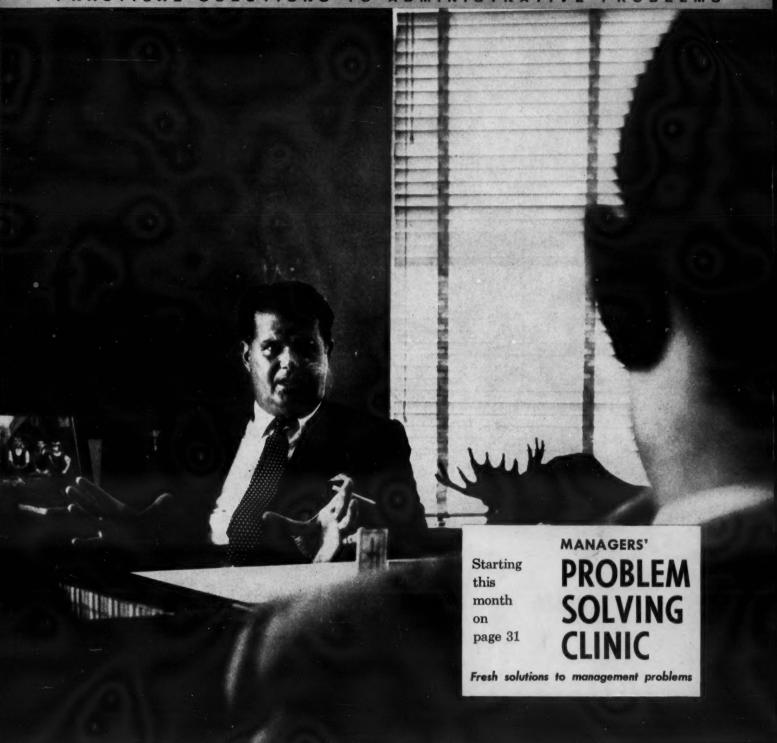
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PRACTICAL SOLUTIONS TO ADMINISTRATIVE PROBLEMS



M. P. Taylor, Taylor-Reed Corp., giving his answers to this month's management problems

IN THIS

Working capital—how to get it when you need it page 39

How to release extra productive power in your people page 92

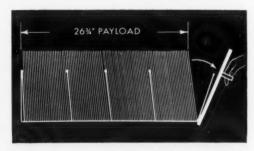
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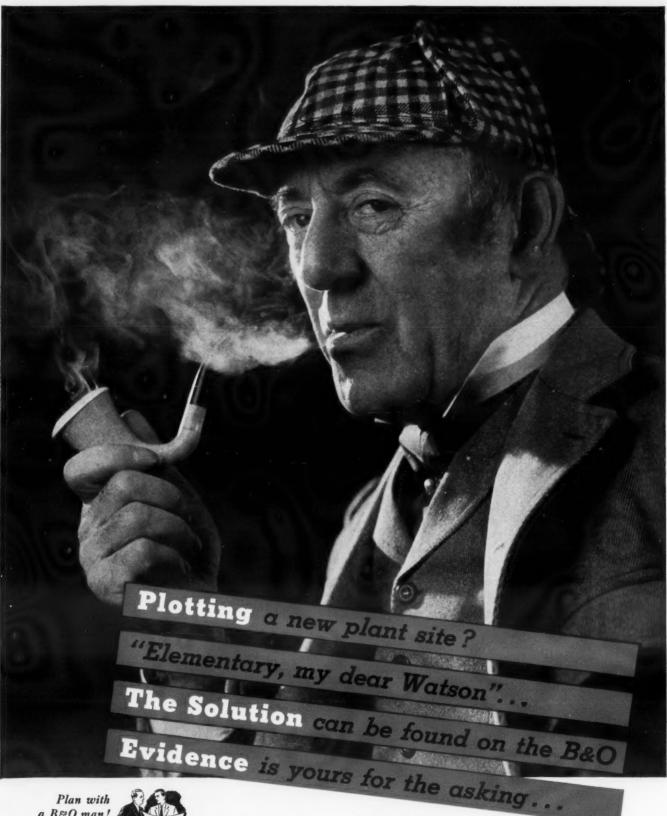
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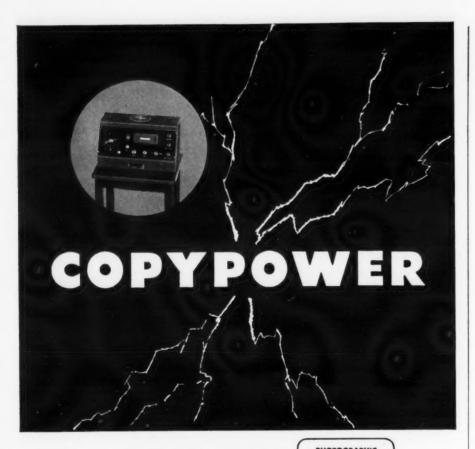
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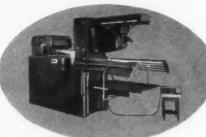


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22 West Putnam Ave., Greenwich, Conn.

Publisher Jerome W. Harris President William 5. Kline

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Los Angeles The Robert W. Walker Co., 730 South Western Avenue, Dunkirk 7-4388

San Francisco The Robert W. Walker Co., 57 Post Street, Sutter 1-5568

Houston Gilman & Roberts, 5210 Morningside Drive, Jackson 4-6633

Atlanta Gilman & Roberts, 4260 Peachtree Road, Cedar 7-6408

A publication of MANAGEMENT MAGAZINES, INC.

22 West Putnam Avenue, Greenwich, Conn. Townsend 9-8585

President and Treasurer, W. S. Kline; Vice President, J. W. Harris; Vice President, A. J. Kaiser; Secretary, E. D. Kline

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Management Methods is indexed in the Business Periodicals Index

SUBSCRIPTIONS: In United States and Possessions, one year \$5.00. Canada, one year \$6.00. Foreign subscriptions \$10.00. Single copies \$.75. When possible, back issues or tearsheets of articles will be provided. Enclose \$1 for each back issue and \$.50 for each back article respected to the course of the public.

quested, to cover costs of handling.

Copyright © 1957 by Management Magazines,
Inc. Accepted as controlled circulation publication at Concord, N. H. Published monthly by
Management Magazines, Inc., 22 W. Putnam
Ave., Greenwich, Conn.

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Policy re manuscripts: The object of MANAGE-MENT METHODS is to offer practical solutions to administrative problems. For that reason we never highlight a problem without offering at least a partial solution or a recommended course of action. Whenever possible, we like to offer the reader something he can do right now to correct a procedure or solve a problem in his business.

Much of our editorial material comes from business and management specialists, as well as from active businessmen, at all levels of management. We endeavor to return all manuscripts. However, we assume no responsibility for material not specially requested by us.

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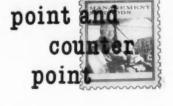
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LETTERS TO THE EDITOR

Telephone costs

SIR: Is it possible to obtain reprints of the article in your August issue entitled "How to trim dollars from your telephone bill"? I would like to order 100 copies if they can be obtained, and will gladly pay for them.

It is an excellent story of how telephone bills can be reduced. Our bills are [large] and I believe we could stimulate some improvements if this article could be well circulated.

Incidentally, I find your magazine most practical, and enjoy reading each issue.

HERMAN W. STEINKRAUS
PRESIDENT
BRIDGEPORT BRASS CO.
BRIDGEPORT, CONN.

■ Although reprints of certain MM articles are available, we cannot reprint all of them. The article on telephone costs, for example, has not been reprinted. In many cases, readers are granted permission to make their own reprints of material appearing in our pages. In requesting permission to reprint, please advise us of the purpose for which the reprints are to be used, and the quantity of copies you plan to make.

EDITOR

MM "the best"

SIR: Enclosed is a copy of the [readership verification] form you recently sent us, showing the correct mailing information, and listing the names of several other executives who we are sure would be interested in receiving a copy of Management Methods each month.

Mr. Smith asked me to let you know that of all the magazines he receives, he considers Management Methods the best.

MARY C. KAIN SECRETARY TO PLANT MANAGER AMERICAN CAN CO. PHILADELPHIA

Article suggestions

Sir: Our division has been [receiving Management Methods] since the origin of your magazine. I con-

sider it to be one of the most useful management magazines being received. It was originally used as part of an office cost reduction program

at plant operations.

One of our problems at the present time is reviewing traveling expense control which has, as you know, been handled rather loosely over a period of years. Probably one of the greatest abuses is the use of entertainment and one of the most difficult things today is to get your cost back in a highly competitive market.

Another problem is one of getting your management policy to be as effective at the bottom of the organization as it was laid out originally by management at the top.

Perhaps sometime you can cover these in your publication.

HARRY M. KAISER
TIRE DIVISION
UNITED STATES RUBBER CO.
NEW YORK

■ MM welcomes suggestions from its readers on article subjects that they would like to see covered. If you have a specific management problem that you feel warrants article treatment, please let us hear about it. Also notice that a new feature, "Manager's Problem Solving Clinic", begins in this issue (see page 31). The format of this feature provides us with an excellent opportunity to report solutions to problems sent in by readers.

EDITOR

Likes PR articles

Sir: I have been a faithful follower of your magazine's excellent public relations series written by Bill Ruder and Dave Finn.

I am wondering if the various PR pieces which have appeared in your magazine in recent months are available in reprint form. . . . we keep just a single copy of your magazine and I would like to have the material in a separate PR file for quick reference.

JAMES L. HOBBINS
ASST. ADVERTISING MANAGER
CORRY-JAMESTOWN MFG. CORP.
CORRY, PA.

■ Ruder and Finn, MM is advised, has reprinted the entire series of articles and will be glad to make them available to anyone writing directly to David Finn, 130 East 59 St., New York 22. Another article in this series begins on page 99 of this issue; it will also be available in reprint form as will others by this same author scheduled for future appearance in Management Methods.

EDITOR



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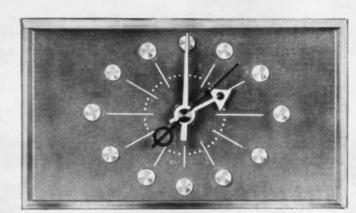
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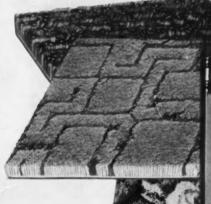
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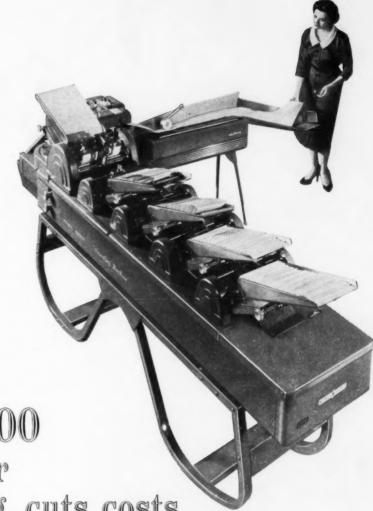
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tax quiz RECENT COURT CASES

By Benjamin Newman

Tax Attorney, Koenia and Bachner, New York.

THE QUESTION

Does the Statute of Limitations apply to the tax return of a taxpayer who has misled his accountant by co-mingling business and personal funds?

THE FACTS-Taxpayer and his wife owned a taxicab company, a school bus business and a limousine and auto rental business. Receipts from the various businesses were kept in a daily receipts book by an employee. Taxpayer deposited some cash payments in his own personal bank account. Many expenses of the various businesses were paid from this account. Taxpayer's accountant, believing that this was taxpayer's personal account, credited taxpayer for these expenses paid, which he thought were paid from personal funds. The accountant had no way of knowing that all business receipts were not properly recorded, since he was never employed to make an audit. Taxpayer did not report these cash receipts as income during the years 1942 to 1948. Years later, when these facts were uncovered and

deficiencies assessed, taxpayer pleaded the Statute of Limitations, contending that the Commissioner of Internal Revenue was barred from asserting deficiencies. The Commissioner contended that taxpayers's acts constituted fraud and that accordingly the Statute of Limitations did not apply.

THE RULING—Taxpayer's acts were deliberate attempts to divert substantial amounts of company income to intentionally mislead the accountant, ruled the Tax Court. Taypayer intended to conceal company income, the Court declared, and accordingly acted with fraudulent intent. Assessment of deficiencies, therefore, was not barred by the Statute of Limitations. (Robert L. Bender, et al vs. Commissioner of Internal Revenue, U. S. Tax Court, decided June 28, 1957.)

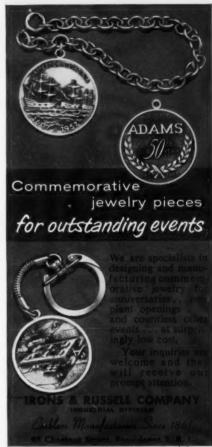
THE QUESTION

Is the rent of a corporation deductible where it is paid to its sole stockholder landlord?

THE FACTS—Taxpayer corporation A was engaged in the sale of auto parts. Taxpayer corporation B was engaged in the sale of waste paper. Both corporations were owned by a husband and wife. Before the organization of corporation B, Corporation A leased buildings owned by the husband and wife. After its incorporation B sublet a portion of A's premises. In 1951, 1952 and 1953 both corporations deducted the rent paid by them. The Commissioner of Internal Revenue dis-

allowed the rent deductions, claiming they were unreasonable, that the corporations were related by common stockholders, that the transaction between corporations and stockholder was not at "arms length."

THE RULING—At the trial, taxpayers introduced expert testimony showing that comparable properties were returning comparable rentals. Expert appraisers testified as to the expected return of property so



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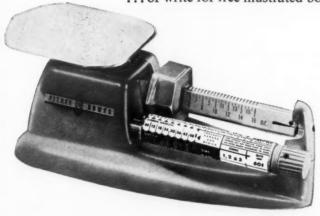


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valued. The Commissioner did not introduce evidence as to the reasonable rental values of the properties.

Accordingly, concluded the Tax Court, the rental deductions of both corporations must be allowed. Their reasonableness was sustained. The fact that the stock of both corporations was owned by the identical stockholders was not a determinative fact. (Ross Auto Parts, Inc., etc. vs. Commissioner, U. S. Tax Court, decided June 28, 1957.)

THE QUESTION

Are the traveling expenses incurred in connection with the performance of official duties as an uncompensated officer of a tax-exempt organization deductible as a charitable contribution?

THE FACTS—In this instance a Revenue Ruling of 1955 is under consideration. The Revenue Ruling stated that expenses incurred in connection with the performance of official duties for a charitable organization were not deductible. The expenses in this case were incurred by officers of a war veterans' organization (exempt under Section 501 of the Internal Revenue Code) and deducted under the provisions of Section 170 of the code. Subsection 170 provides that the term "charitable contribution" means a gift to or for the use of a post or organization of war veterans. The question for consideration is, are travel expenses, so incurred, charitable contributions?

THE RULING—Upon reconsideration of the ruling, it was held that traveling expenses incurred while performing official duties as an uncompensated officer of an organization exempt from Federal income tax under Section 501 of the Code are deductible as charitable contributions within the meaning and intent of Section 170. (Revenue Ruling 55-151 July, 1957.)



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OASIS Beverage Center. Hot 'n Cold (left) plus attractively color matched 4-shelf Beverage Locker (right). Holds hundreds of assorted instant beverage envelopes, cups and spoons. Locks for safekeeping.

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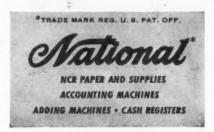
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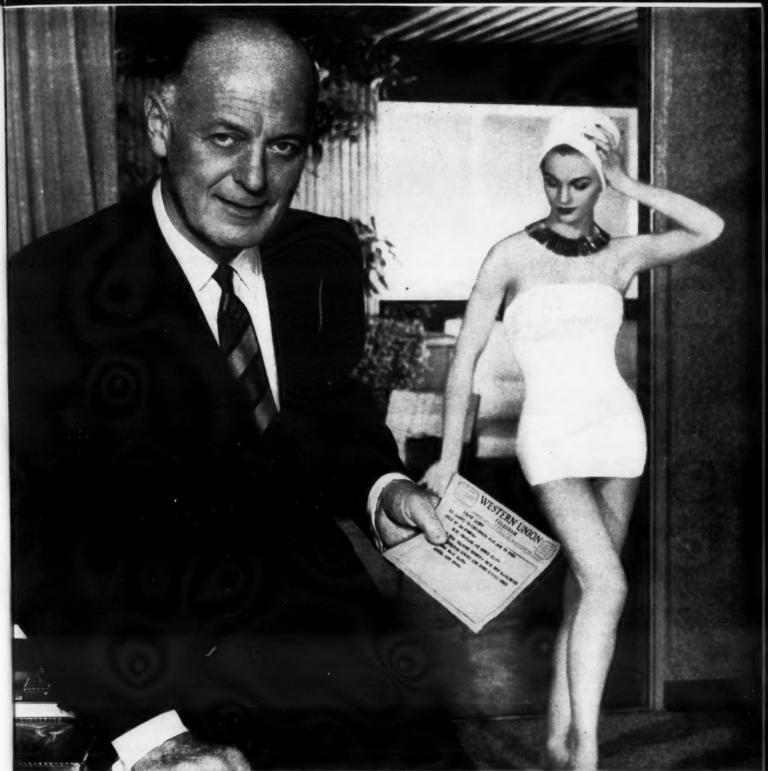
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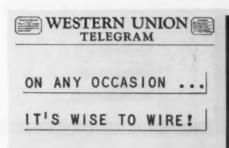


Fred Cole, President, Cole of California, as photographed by Mead-Maddick

Fred Cole shows beautiful figures with telegrams

"Reorders are the profitable part of our business," says Fred Cole, President of Cole of California, "and they could not exist without Western Union! Here's why: swimsuit sales are as sensitive as a barometer to changes in weather. Last summer, for instance, a hot spell in Cleveland brought a run on suits. Store buyers there reordered 101 dozen by wire; we acknowledged by return wire, giving shipping times as well. You just can't beat the telegram for getting business done fast—and in writing!"

More than a million times a day, business finds it wise to wire. Telegrams quote prices, confirm orders, route shipments. Speed plus the written record make the telegram essential to business.



What about Christmas gifts for

Most companies give Yuletide presents to their customers. Yet more than 80% of the firms in this survey say they would like to see the practice curtailed or eliminated completely.

More than half of America's business firms make it a practice to give Christmas gifts to their customers. Yet an overwhelming majority of company presidents believe that the practice has gone too far.

A sampling of company pres-

WHAT THEY SAID

1. Does your firm send Christmas gifts to customers?

yes	53%
no	
	47%

2. Which customers are included on your list?

all customers	
	8%
those who have done business during the year over a specified volume	
	45%
those whose business placed with us has fallen below previous levels	
	4%
sales manager (or other executive) makes up list each year	
	29%
special customers	
Name of the last o	14%

3. How much do you normally spend per gift?

under \$5	,
Under 45	40%
\$5 to \$10	45%
\$10 to \$25	
\$25 to \$50	10%
M	5%

4. How many customers do you send gifts to each year?

10 to 50	
ACCOUNTS ON THE PARTY OF THE PA	26%
50 to 100	
	35%
over 100	
(= 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 =	39%

5. What is your biggest single reason for sending gifts to customers?

to mark the spirit of the season	26%
because it makes for good customer relations	61%
because we have found that it is reflected in increased business	13%
because it is traditional, and our competitors	
continue to do it	30%

6. If you do not send out gifts, have you done so in the past?

yes	50%
no	
	50%

7. What was your biggest single reason for discontinuing this policy?

too expensive	13%
too much time spent in working up lists	13%
proved not worth the effort	40%
created resentment and friction	21%
customers asked us to discontinue	6.5%
couldn't keep up with competition	6.5%

8. Should presentation of Christmas gifts from supplier to customer be

continued	19%
curtailed	26%
eliminated	55%

customers?

idents, in a regular Management Methods monthly survey, reveals that 53% of business firms do send holiday gifts; but 55% of these responding to the survey indicate that they feel the custom should be eliminated and an additional 26% say they'd like to see it curtailed. Only 19% of the respondents disclosed an opinion that Christmas giving by firms is a practice that rates continuation.

Among the 47% who do not make it a practice today to give presents at Christmas time, there is equal division in reference to earlier practices, with exactly half indicating that at one time they did send out gifts to their customers.

Of this group, 40% gave it up because they felt that the results were not worth the effort. Some 21% said it had created resentment and friction, 13% more disclosed that the practice had proved too expensive and another 13% stated it had consumed too much time and effort.

In more than one case, a company executive told MM that his customers had requested him to discontinue, while other respondents said that they had found it impossible to keep up with competitors and thus gave up altogether.

Reasons for giving

Good customer relations rates as the outstanding motivation among those who do send Christmas presents. Almost half of those who cited this as their reason for subscribing to the custom also noted that they felt the practice marked the spirit of the season. This indicates, of course, that the two factors are closely related in the minds of many executives. A substantial group, however, noted that they send gifts because it is the traditional thing to do and represents a practice followed by their competitors. Only a few presidents





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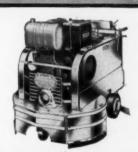


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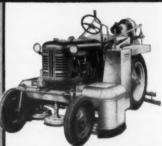


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10,000	40 hours	15½ hours	518-46 minutes
50,000	200 hours	77½ hours	524-2.9 hours
120,000	480 hours	182 hours	530-4.4 hours
300,000	1200 hours	467 hours	537-9.0 hours
1,000,000	4000 hours	1550 hours	560-10.8 hours

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"It's saving the company a lot of money, too . . . over \$100 on every one of our employees in working time annually! They like having their own refreshment center so handy . . . and the Westinghouse Hot and Cold saves them about 4 cents on every cup of coffee, tea, cocoa or soup they drink. Besides that, it's two water coolers in one—serves plenty of cold drinking water, too."

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trol the coffee-break in your company.
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Control the coffee-break in your company. To see how convenient the new individual beverage packets are—mail coupon below for FREE "STARTER PAKS" of famous brand instant beverages.

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frankly acknowledged that they found such giving paid off in terms of increased business.

Methods of drawing up the annual list of recipients seem to vary widely. In most cases, it appears, presents are automatically forwarded to those customers who have placed a specified volume of business, but some firms apparently take the opposite tack and send gifts to jack up those customers whose orders have fallen off. In many cases it is the practice to turn the job of gift-list preparation over to the sales manager or other executive, who exercises his own subjective judgment. Only a small number of firms send a gift to every customer on their books.

The average company spends less than \$10 per gift and includes between 50 and 100 customers on its list. One middle western building materials organization reported that it sends some 1,800 to 2,000 presents each Christmas, at a cost of about \$3.50 per gift.

Some companies, in recent years, have begun to make monetary donations to various worthy causes during the holiday season, in lieu of sending gifts to customers. Typical is this statement from a Pennsylvania highway common carrier:

"Prior to 1956 we gave Christmas presents to many of our customers and acquaintances. Each year the list grew so that by 1956 we were spending a great deal of time in taking care of them, not to mention the greater strain of Whom did we forget?"

"Beginning last year we initiated a scholarship award program for all high school seniors in all the towns we serve, and the first awards were made this summer. Results are most gratifying."

A new trend?

Another example of what may become a trend in this direction is the recently adopted practice of a New York advertising agency. This firm makes a contribution to UNCEF, the United Nations Children's Fund, each year, and notifies each individual on its former gift list that a contribution has been made in his name.

About 25% of the respondent firms indicated that they do not permit employes to receive Christ-

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COTTON* fits perfectly into clothing maker's plan



*Fairfax Towels used by Eagle Clothes are supplied by Office Towel Division, Consolidated Laundries Corp., 321 East 94th St., N.Y.

When Eagle Clothes drew up plans for its new three-story Brooklyn building, the company decided that it would be the very last word in men's clothing plants. It not only is one of the largest, most modern of its kind in the world, with respect to layout and equipment, but it also offers the most modern facilities for Eagle's 1,200 employees—for example, an extremely well-equipped cafeteria, and a number of spotless washrooms. And in those washrooms, cotton toweling.

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WELLINGTON SEARS COMPANY, 65 WORTH STREET, NEW YORK 13, N. Y. WELL POINT (Circle number 287 for more information)

mas gifts from suppliers; in almost every case those with such policies do not give Christmas gifts themselves. Among the firms which do permit staff members to receive holiday presents, comments indicate that they do not like the idea but accept the inevitable, since they have no effective method of enforcement.

Even among those who do not permit the receipt of gifts there is fairly general admission that it is necessary to close one's eyes to violations of it, although all firms in this category reported that they have made all of their suppliers fully aware of their wishes in this respect.

WHAT THEY SAID

A review of current surveys

Double employment poses problem

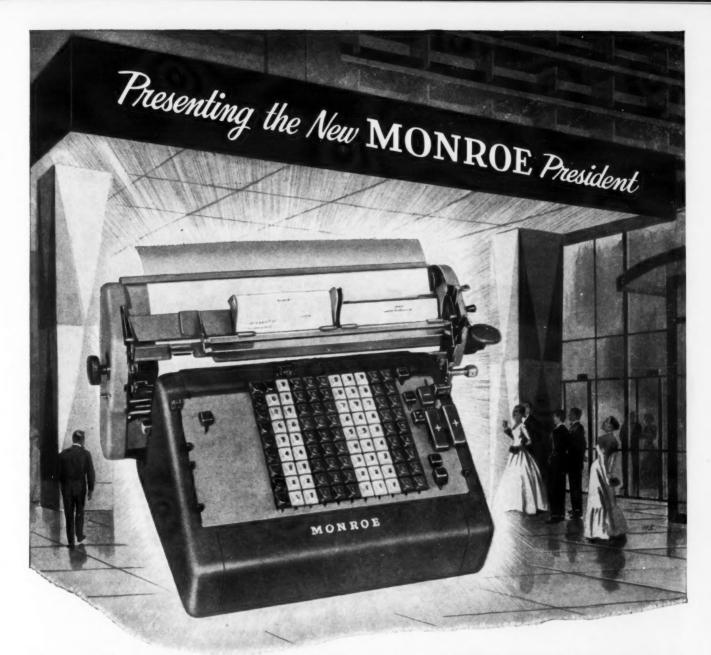
"Moonlighting", or double employment, is on the rise.

How does management feel about the problem? The National Industrial Conference Board recently questioned 25 representative companies about the new situation. Fifteen described its effects as "not serious"; five said it was a "minor headache"; the remaining five felt that it represented a "fairly serious" problem.

One firm said that to the best of its knowledge it had no moonlighters. At the other extreme, three executives estimated 25% of their production workers had second jobs, two firms reported 20% and two others 10%. One said that 50% of its highly skilled workers had double employment.

Among employees working a 40-hour week, moonlighting was put at 8%; among those working less than a 40-hour week the estimate climbed to 14%.

While most companies frown on moonlighting or attempt to forbid it entirely, they do not always know if and where it exists. Some firms are inclined to tolerate or ignore the practice as long as it does not get out of hand, and a few companies expressed a willingness to hire men even when it was known they were employed elsewhere. m/m



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NEW YORK-Your address during two-week stay will be one of the proudest in the world-The Waldorf-Astoria. But you'll be everywhere: Touring Radio City; dining at "21"; seeing "My Fair ; visiting the UN; gazing Lady down from the Empire State Building; being introduced on the Kodaksponsored Ed Sullivan Show.



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Movie Outfit











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Join the cheering section—get your secretary to enter Kodak's easy "Tell the boss" contest. If she wins one of the 101 prizes, you win, too—a handsome Brownie Starflex Outfit. All she has to do is answer the question above. Nothing to buy. Nothing to try-unless you insist.

SIDE from the fact that A the prizes are plentiful and well worth shooting for, you and your secretary will find this contest educational. Even revelational!

For what boss wouldn't like to learn how he can skip hours of paper work? And what secretary wouldn't be happier with far less typing?

All of this is possible—as thousands of offices have discovered-when you have a Kodak Verifax Copier, which gives you 5 copies of anything in 1 minute for just 21/2¢ each.

This completely different copier, for example, lets you answer half your mail with-

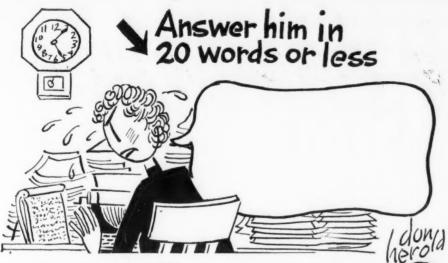
out dictation and typing -do away with those repetitive "I quote the customer" memos. How? Just use the "Verifax pencil trick." When a letter asks questions, jot the answers in the margin and mail a Verifax copy as your reply. When a report refers to several departments, jot again: "Tom: see this (paragraph)"; "Dick: check this"; "Harry: note this." A minute later your secretary will have Verifax copies on their

101 Short cuts

You'll save ten minutes here, ten minutes there all day long. And your secretary will do even better with this

NOTHING TO BUY . . . SIMPLE RULES

- 1. You must be employed as a secretary, stenographer, or typist in the United States, or in its territories or possessions. "Girl Fridays" in "one-man" offices are eligible.
- 2. Just answer the boss in your own words, 20 words or less. Verifax Copying need not be mentioned.
- 3. Send in as many entries as you wish. Write plainly or print each entry on an official entry blank, such as the attached coupon or blanks obtained at Kodak Verifax dealers. (Check "yellow pages" under "photocopying equipment" or similar "photo" heading for address of nearest dealer.) All entries must be postmarked no later than December 1, 1957 and received no
- later than December 10, 1957.
- 4. Entries will be judged on originality, humor, and aptness of thought by the Reuben H. Donnelley Corp. Duplicate prizes in case of ties. Judges' decision final. Entries, contents, and ideas therein become the property of Eastman Kodak Company for any and all purposes. No entries returned. All entries must be the original work of contestants and must be submitted in their own names Employees of Eastman Kodak Company, its direct dealers, and its advertising agencies are ineligible.
- 5. This contest is subject to all federal, state and local regulations. Contest winners will be notified by mail. A complete list



secretary say

completely different copier that ends retyping, proofreading and mistakes.

She'll never have to type copies of incoming reports, quotation forms, magazine articles—what have you? "All day" retyping jobs can be done in 20 minutes. And when you order three carbons -but find you need five-no harm done!

Completely different

Does more. A Kodak Verifax Copier makes 5 copies in 1 minute on standard weight paper, card stock, office forms. Alsomakes"masters"forusein whiteprint and offset machines in 1 minute. Snap to operate, no change in room lighting.

Costs less. You can get one of these Verifax Copiers-the Signet model-for \$148. Actually less than the cost of an

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Misses nothing. Your Verifax copies are photo-exact from top to bottom. All types of writing or printing-even purple duplicator inks-are copied as readily as typed data. And your Verifax copies will last as long as originals.

Get your secretary to mail coupon today. No doubt she'll have two or three good answers after reading these pages. No limit on entries. She can pick up extra entry blanks and a copy of Don Herold's amusing booklet on 101 Verifax short cuts at nearest Verifax dealer. (See "yellow pages" under "photo-copying equipment.") Good luck to you both!

Price shown is manufacturer's sug-gested price and subject to change without notice.

Gentlemen: I'd tell my boss:_



of winners will be mailed approximately eight weeks after close of contest to any person who requests it and sends a stamped, self-addressed enve-lope to Eastman Kodak Com-pany, Box114, Mt. Vernon, N.Y.

- 6. 100 runner-up prizes. Each runner-up winner can choose either of these prizes:
- 1) Kodak Pony Color Slide Outfit, which includes the capable Kodak Pony Camera to make your slides . . . and the efficient Kodak 300 Projector with Readymatic Changer to show them.
- 2) Brownie 300 Movie Outfit, which includes the Brownie Movie Camera with f/2.3 lens and the Brownie 300 Movie Projector with built-in preview screen.

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EASTMAN KODAK COMPANY, Box 115, Mt. Vernon 10, N. Y.

(answer in 20 words or less)

I'm employed by.

(Name of Company)

Company's address_

(street)

(city)

(state)

Boss's name

Please check: Does your office have a copying machine? Yes

No

If so, what kind?_

Kodak

(Circle number 290 for more information)

NORTH CAROLINA"

RECORD OF SUCCESS CONVINCES YALE & TOWNE

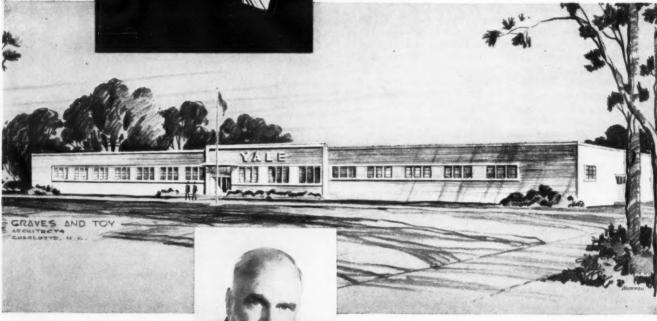
For the site of its seventeenth plant, Yale & Towne checked every state, town by town. North Carolina scored on every point:

Nearness to markets ... modern transportation by land, sea, and air ... intelligent personnel ... climate for low-cost production and year-round outdoor living ... cooperative government and communities.

A year after choosing a North Carolina site, Yale & Towne officials are high in its praise: "In North Carolina, we found the kind of place and the kind of people that make for success," says Yale & Towne Vice President Leo J. Pantas, General Manager of the Yale Lock and Hardware Division, which now has a new plant at Monroe, N. C. "We know people help industry to succeed. Monroe folks gave us a warm welcome. They think straight, talk straight. To them a job is an opportunity."

Monroe is just one of scores of North Carolina towns where industry thrives among green fields and friendly people. North Carolina development engineers will help custom-plan your expansion site. Write or wire Wm. P. Saunders, Director, Dept. of Conservation and Development, Raleigh 4, North Carolina.





Business Man Governor Luther H. Hodges whose dynamic leadership has brought about tax reductions put into effect July 1, 1957.

NORTH CAROLINA
Year Round Mid-South

(Circle number 291 for more information)

There's seldom a single "best" answer to a problem. Here four top executives describe the diverse actions they'd take to solve some common problems of management.

MANAGERS' PROBLEM SOLVING CLINIC

This "Managers' Problem Solving Clinic" is a new Management Methods feature. It is designed to give you ideas you can apply right now to solve both the personal and business problems you face in your management job. The material on the following pages consists of excerpts

from tape recorded interviews conducted by MM editors with executives like yourself. If you have a problem you would like to see treated in this "clinic," submit it to us and we will endeavor to publish a cross-section of management judgment on it.

SOME METHODS THAT MANAGERS ARE THINKING ABOUT

- How owner-managers can protect their families from the tax impact of their death.
- 2. Does it pay to pirate men from bigger firms?
- 3. Steps you can take to pull distribution costs into line.
- 4. Ideas to help you make meetings more profitable.

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THIS MONTH'S MANAGEMENT PANEL

Stuart F. Smith

Vice President & Director
CONNECTICUT GENERAL
LIFE INSURANCE Co.
Hartford, Conn.
Employees: 2,400 (Hartford)
Product: life, accident,
health and group insurance

R. Stafford Edwards

President
Edwards Co., Inc.
Norwalk, Conn.
Employees: 610
Product: electric signaling devices

Malcolm P. Taylor

Chairman of the Board
TAYLOR-REED CORP.
Glenbrook, Conn.
Employees: 110
Products: Cocoa Marsh,
E-Z Pop popcorn & other
packaged foods

Frederick H. Klein

President
ORR & SEMBOWER, INC.
Reading, Pa.
Employees: 400
Product: packaged automatic boilers











When a man is both a top executive and major stockholder in a closely held company, what can he do to protect his family—and his company—against the tax impact of his death?



"A trust has been formed that carries the stock to the third generation. The trustees have very wide powers."

R. STAFFORD EDWARDS Edwards Co., Inc.

Q. As major stockholder in your firm, Mr. Edwards, have you given personal thought to this particular problem?

A. I don't know anybody who hasn't! Sure, you are struggling with it all the time.

Q. Can you tell me what approach you have selected?

A. Yes. A trust has been formed that carries the stock to the third generation—in other words, my grandchildren—in the meantime providing for income for the others. So there will be only one tax on three generations. And I have made plans that I hope will pay the tax and leave the stock intact. The trustees have very wide powers. They may have to put up all

the stock as collateral to borrow the money to pay the inheritance tax. The beneficiaries may have to do without any income from the trust for a period of five or 10 or 15 years even to pay the tax. But that is all written into the trust so that putting up the stock as collateral or anything else can be done to pay the tax. Now that is the way I hope it is going to work.

"I'd hot-house and train a competent successor, and arrange things so he couldn't be sabotaged by family or trustees."

STUART F. SMITH Connecticut General Life

Q. What would you do to solve this problem, Mr. Smith?

A. The first thing I'd do would be to search my organization for a competent successor. I would hot-house him and train him and make it possible for him to purchase, after my death, a substantial portion of the stock, but not the control. I'd keep

the balance for my family, not in their hands outright, but in trust. I would make available to this man, as a bargain, such a heavy interest in the business that the perpetuation of it would be most attractive.

Q. You would make clear to him exactly what your purpose was—to perpetuate the business for his benefit, but primarily for your family's.

A. That's right. And I would make his the position of real influence in the company after my death. I would have him own the minority holding and be one of the three trustees for the majority holding. That way, if he became difficult or my judgment about him had been wrong, he could be out-voted by the majority trustees. But he'd have to be awfully wrong to be sabotaged by family or trustees.

Q. He would, in fact, have management control squarely in his hands?

A. Very squarely in his hands, so long as the other two trustees didn't think he'd gone too far. They'd have the power to go against him if the evidence was bad that he was mishandling the company.

"I'd search
for a
competent
successor."





"Through gifts, I'm starting to prepare myself. You can remain a trustee of the estates so that if you ever want to sell out, you can."

Frederick H. Klein Orr & Sembower, Inc.

Q. What is your answer, Mr. Klein, to the tax impact of your death?

A. The best thing you can do is have the company buy insurance on your life up to the maximum, depending on your health and the company's ability to pay. That would be number one. Upon your death, the insurance results in a tax-free payment into the company treasury. Now, assuming your relatives are the stockholders of the company, they've got to get the inheritance tax paid. So what they could do is sell their stock to the company for cash, which gives them a considerable sum to help defray the inheritance tax.

Q. How do you transfer the stock to your relatives in the first place? A. Through gifts. Through a gift basis, I'm starting to prepare myself now. Under this arrangement, you can remain a trustee of the estates if you want to. Then if it comes down to the point that you want to sell out, or you don't have anybody coming along

who looks like he can row the boat, as a trustee you can bring your influence to bear so that the company can probably be converted to stock of another company or to cash. You get yourself out and also the beneficiaries get their share.

Q. You are using this insurance and gifts method?

A. That's right, I'm looking at it from the point of view of what I hope my beneficiaries might do.

"If a man is fortunate enough to build a small growing business that is throwing off some profits, he's forced to consider selling out."

MALCOLM P. TAYLOR Taylor-Reed Corp.

Q. Mr. Taylor, you and Mr. Reed [Charles M. D. Reed, president] formed this company 19 years ago on a shoestring and have made quite a success of it. Together you hold the controlling interest. What thought have you given to the tax impact of your death?

A. That is probably the biggest problem facing all small companies like ours. Depending on how lucky or successful you are, the problem increases. To keep our company growing and competitive, we've re-invested most of our funds. As a result, we can't afford the kind of safeguards we'd like to provide for our families. It's like buying a car—you buy the one you can afford. In our case, we figure we had better keep living because if we die it will be just too darn bad for our widows.

Q. What have you been able to do? A. Specifically, we have key man insurance which protects the company and our families. Charlie Reed and I have tried to buy as much insurance as we can possibly afford. Our insurance stakes are laid out. In addition, we work out stock option plans from year to year between ourselves wherein each of us has the opportunity to buy the other's stock at a certain price in the event of death. That way we insure that the survivor won't lose management control.

Q. But you feel the problem really can't be solved completely?

A. That's right. This idea of taking unlisted stock securities and then just putting arbitrary value on them—it's a very stupid thing. It should be rectified. If a man is fortunate enough to have built a growing business that is throwing off some profits, he is really forced to give some thought to the possibility of selling out, because of the tax setup.

PROBLEM 2

Is it a profitable practice for small firms to raid big and giant companies for personnel—to pirate their executives, engineers and other key people?

"Big firms screen their personnel pretty well, so when some of them begin to get dissatisfied, you have a choice group to pick from."

FREDERICK H. KLEIN Orr & Sembower, Inc.

Q. Mr. Klein, do you think small firms can successfully recruit good people from big organizations?

A. I certainly do. You take the fel-

lows who go through engineering school and then are recruited by big companies. When the recruiters are coming around, these fellows aren't very much interested in talking to the small company men. They want to work for a big outfit. But there is a certain breed of these men that begins to get sick of the high floor and low ceiling you find in a lot of big corporations. After awhile, a man of this breed wants to get out. He wants to go to work where he can move



EDWARDS

faster and freer, and where things are a little more interesting. He becomes dissatisfied with the very rigidity of the organization.

Q. Specifically, what is it that causes such a man to lose interest in a big company?

A. Well. I think it is due in part to the fact that individual effort may not be recognized. Further, big outfits tend to regiment their people, and that makes them dissatisfied. A young man may be forced to live with an exact and very narrow job description, and he may have a seniority problem to contend with. If he's in grade 6-D and a job opens up in 7-A there may be a good deal of politics involved in who gets the job. Of course, he's probably got a pretty good salary and can look forward to a good pension when he retires. It's a nice insulative way of going along. A lot of people like that arrangement. But some don't like it a bit, and those are the ones we go after. Some of the boys that we have drawn from big companies are good because they are not big organization men, as such.

Q. Then they're not "washouts" from big companies.

A. Far from it! Of course, there are all sorts of reasons why a man might want to leave a large company and join a small one. It might be a personality problem. It might even be on the female side—there are a lot of jealousies surrounding big company operations.

Q. Would you say, then, that recruiting men on the rebound from big companies is a prime method that small companies can use to build a management and technical staff?

A. Yes. Remember, big companies screen the people they hire pretty well, so when some of them begin to get dissatisfied, you have a choice group to pick from.

Q. What appeals can you offer to draw a big company man to your company?

A. For the kind of people we want, an offer of increased responsibility is probably the strongest motivation of all. And that's exactly what we offer. We just offer him an opportunity to get in there and pitch.

Q. Doesn't salary enter into it?

A. Well, of course, it does. In fact, on a salary basis, a big company can often turn the tables on small firms when it comes to attracting personnel. For example, a big corporation moved into one town a year or two ago and nearly took away the entire engineering department of one of the local concerns, due to the higher rates the big company offered.

"When a small firm pirates from a bigger company, it almost always gets the grade B and grade C men. The best men aren't susceptible."

STUART F. SMITH Connecticut General Life

Q. Do you think it's a bona fide practice for small firms to raid bigger firms for management personnel?

A. It's done all the time. But I don't think it's smart to be in a position where you have to be a pirate.

Q. Well, can small companies get really good people by pulling a man out of a big company where he may be on his way up the ladder but doesn't feel he's getting the responsibility and salary he deserves?

A. They almost always get the grade B and grade C men.

O. Why is that?

A. It's because the A men have such a feeling of movement and growth and exposure that they know they are marked for big things. For example, it would be pretty hard for our competitors to offer our grade A men a 20-year future comparable with what they can expect here in terms of personal growth, base salary and profit sharing. They might get the man who knows he is not going to the top in his field or group.

Q. In other words, you are saying that the best men are satisfied in their jobs?

A. Well, yes.

Q. And the B and C men are not satisfied?

A. Some of them are and some aren't. One type of individual will say to himself, "Well, I'm going to be a vice president somewhere, but Bill Brown and John Jones are pretty fast company here, so I'll get out and go where the competition isn't so great." The other kind of man says to himself, "Well, it's pretty obvious that John Doe is going to be a vice president

and I'm not, but I'm willing to settle for a lower job. I won't ever admit that, but I know I'm going to stay."

"The ability that might get a man a quarter of the way up a big firm's ladder might be enough for him to do a terrific job in a small firm."

R. STAFFORD EDWARDS Edwards Co., Inc.

Q. It's been said that when a small company recruits from a big company, it gets only men of secondary quality. Do you agree with this statement?

A. No, I don't agree. If you have a base of 25,000 employees, let's say, the road up to the top is much more selective and competitive than in a small business. The ability that might get the man a quarter of the way up the ladder in a big company might be enough for him to do a terrific job in a smaller corporation.

Q. In other words, you might not be able to hire their top men but . . .

A. You might get the man who would never be president of General Motors, but he might turn out to be a good president of the Edwards Co.

Q. Does your firm make a practice of recruiting from its larger competitors?

A. No, I don't believe in stealing a man from a competitor.

Q. Why not?

A. I'm not just being altruistic. In



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most cases when you hire a man from a competitor, his value is dependent a great deal on how much confidential information he can bring you. Too often I think he brings information that he has blown up, or that doesn't exist at all, just to build up his own value. If you act on what he brings you, you are liable to find yourself out on a limb.

Q. But you do think it can be profitable to recruit from bigger firms that are not direct competitors?

A. Yes. A man in a big company may have all the ability, training, education and everything else needed to move ahead, but he may be stopped because the base is so large. He wants to move ahead but he can't. Put him in a small company and he really goes to town.

Q. Do you have people in your organization who have come from very large corporations?

A. Yes. But we haven't directly recruited them; it just works that way.

Q. Do you find they are good people as far as your organization is concerned?

A. Well, yes. Part of the reason is that we are very strict in our hiring methods. We test to an extreme degree everyone we hire. The fact that a man has been successful with the XYZ Corp. isn't a good measurement of how successful he can be with us. We have different methods, different standards, different organization. I think emotional stability is more important in a small company than in a big one, because in a small outfit like ours people work much more closely together. That's one reason we're so strong on testing. We test on all jobs, right up to the top.

"Big corporations are trade schools for young men who will some day make wonderful executives for smaller firms."

MALCOLM P. TAYLOR Taylor-Reed Corp.

Q. Mr. Taylor, what do you think of the practice of pirating people from competitors or other firms?

A. It's a very bad practice. Of course, it depends on what you mean by pirating. I consider it pirating when you hire away a competitor's advertising manager by paying him \$5,000 more than he's making. I'm not in favor of

that kind of practice. In fact, if this advertising manager came to us and applied for a job, I doubt that we'd hire him even if he were the best ad manager in the world. It would give us an inside into that competitor's business that I think we'd like not to have. We'd rather fight our competitors on an open basis.

Q. Do you mean that you would never hire a man who worked for a competitor?

A. No, I don't mean that at all. If you have a situation where a really capable guy is blocked in a competing company, I wouldn't consider it pirating to hire him for a position considerably above the position he

holds. Then it would be a mutual benefit for both companies as well as the man himself. This kind of thing happens many times: a sales manager will call up and say, "I've got a darned good man and I'm crazy about him but he just isn't good for us. Do you have a spot to put him in?"

Q. Do you feel that big organizations have a large number of these good men, who, for some reason or other, will work out better in a smaller firm?

A. I would say that most really big corporations are actually trade schools for young men who will some day make wonderful executives for smaller firms.

(Continued on page 106)

"We'd rather fight our competitors openly"

TAYLOR



How to manage an invention

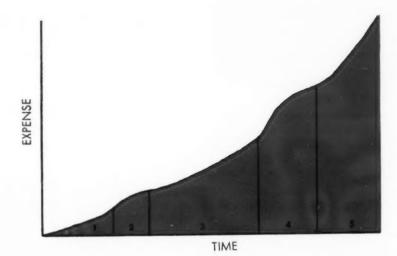
EDITOR'S NOTE: Every invention has its characteristic cost history curve. To deviate from it means trouble; to adhere to it can mean profitable exploitation. Once a section of this curve is incorrectly plotted, it cannot be erased.

Arthur D. Little, Inc., has successfully managed a variety of inventions held by its clients over a period of many years. This article presents some of the findings that have been derived from the company's experience. It will show you how to achieve successful commercialization of your inventions. It will show you how, at critical points along the curve, the twin dangers of wasted money and misdirected efforts can be avoided.

The accompanying motif represents one way of looking at an invention. It may not be familiar, but it represents the cost history of a typical successful new product—as definitive in some respects as a photograph, a process flow chart or a wiring diagram.

Every invention has its characteristic commerical curve. Each curve has an optimum shape and length peculiar to the subject matter and its attendant circumstances. To deviate from this optimum shape means trouble; to adhere to it means profitable commercialization. Unfortunately, management cannot erase a poorly plotted section of the curve, nor can it always predict the best configuration.

Management is skilled at mak-



ing decisions relating to the normal activities of its company. These decisions are based on information with which management is familiar; they can be appraised and modified before large amounts of time and money are consumed. On the other hand, from the time an invention is conceived until it is fully commercialized, there are countless occasions when impractical or improper decisions may go undetected. A poor decision, particularly in an early phase of invention management, can result in such serious financial losses that the very existence of the company may be threatened.

What are some of the basic reasons for poor decisions? A major cause of invention mismanagement is frequently the company's attitude toward inventions. Because of the present hunger for product diversification, many companies have undertaken the exploitation of products that do not warrant commercialization. Similarly, the commercial development of sound inventions has been under-

taken by companies poorly suited to provide the necessary technical, financial and business resources.

An overcautious attitude may also result in the poor management of inventions. Conservative companies have a tendency to avoid new product opportunities, particularly when they lead to diversification or to a change in the direction of company activities. As a result, benefits arising from commercialization are ignored, as frequently are opportunities to develop revenue by the licensing of the invention to another company.

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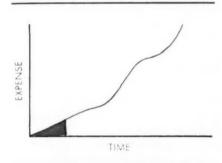
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Another cause of invention mismanagement is the failure to use simple, tested procedures, particularly in the areas of evaluation and licensing. The following sections discuss in some detail how these procedures may be used. While parts of this guide to invention management may appear obvious, the proper execution of the various phases described may often be overlooked or misdirected. The commercial success of any inven-

Every invention possesses peculiar self-contained development characteristics that must be recognized to avoid the possibility of serious financial losses. Here, an expert in invention management tells you what pitfalls to avoid.

tion depends not only on doing what is required, but also on the effectiveness, timing, and extent to which the requirements are satisfied.



Preliminary development

When an invention is conceived, it is usually brought to the attention of the inventor's immediate supervisor for preliminary screening. Since the supervisor normally decides whether preliminary technical development should follow, it is essential that he clearly understand management's invention and new-product policies. In particular, an invention should not be rejected from further consideration merely because it does not satisfy the company's immediate needs.

A worker in the shipping department of a chemical company developed a superior pallet. His foreman failed to bring the invention to the attention of management, believing that a nonchemical idea would be of no interest. The pallet was subsequently commercialized by another concern, with no benefit resulting to the chemical company or to the inventor.

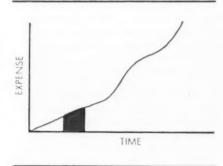
After it has been decided that the invention merits further examination, preliminary technical work brings the invention to a point where it is sufficiently developed for a comprehensive evaluation. During this preliminary developmental phase, depending on the nature of the invention, interim evaluation may be made concerning technical and commercial feasibility.

Evaluation

As one might assume from the curve, the evaluation step, while relatively brief and inexpensive, primarily governs the extent and direction of future spending. It is alarming to note the many instances in which this vital step is lightly taken or completely overlooked. In many cases of commercially unsuccessful inventions, the errors made by management may be traced back to this phase.

The first step in evaluating an invention is an objective appraisal consisting of the four separate reviews shown below:

Technical Is it practical?



Has the best possible embodiment been determined?

Is it a real advance in the art or merely a slight improvement over conventional apparatus or devices? The answers to these and other related questions should be sought from technically qualified people, even though they may not be found on the technical staff of the company. If the invention relates to a field substantially outside the company's area of interest, it is usually desirable to seek the opinion of a recognized consultant or of those active in the industry to which the invention relates.

Market

Does a real need exist for the invention?

How large is the market?
What are the characteristics

What are the characteristics of the market?

Improper evaluation may be more frequently traced to cursory or inaccurate market reviews than to any other phase of invention appraisal. Companies with market-research staffs may find the answer to these questions internally. It is highly recommended that companies without market-research facilities seek the advice of industry experts or qualified consultants.

Economic

How much will it cost to produce? What are the costs of competitive products?

What are the advantages and disadvantages of the invention with respect to purchase price, operating costs, and maintenance costs?

Answers to these questions can usually be obtained from within the company, from sales literature, and from companies active in the industry.

Legal

Is the invention patentable?
Does it infringe other patents?
Are there any antitrust considerations?

Legal opinion should be obtained from the company's patent coun-

In reviewing the invention from the four standpoints listed above,

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management should be certain that the review is objective and not at all related to the product requirements of the company. If the invention fails to pass any one of the four screens, it should be seriously considered for rejection. In many instances, new product possibilities will not be patentable but will offer real commercial advantages to the company; in such cases, of course, attempts at exploitation should continue. However, inventions that do not pass the technical, market, or economic screens are destined to unsuccessful exploitation.

After an invention has successfully passed the first step of evaluation-the objective appraisal-it should be reviewed in the light of the objectives and characteristics of the company. As a second step, management should not only consider its own abilities and objectives, but also relate the the company's invention to resources in the fields of finance, marketing, production, and engineering. After this analysis, management should decide whether the invention should be exploited by the company or commercialized by another company through license or sale.

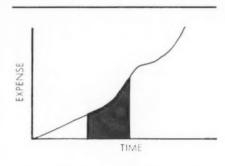
A new gasoline cutting torch was invented by a technically based company that had the necessary resources for engineering, production, and product development. The torch successfully passed each of the four evaluation reviews. In view of the company's weaknesses in marketing and promotion, the torch was licensed to a manufacturer of portable industrial equipment.

The following three sections discuss the commercialization of an invention when it is undertaken by the invention-owning company. The last section, "Licensing," describes the way in which good inventions falling outside the company's area of interest might best be exploited.

Planning and development

Once the decision has been made to commercialize the invention, management must determine, on the basis of its experience, what is to effect maximum exploitation. It is essential at this point that consideration be given not only to technical-development requirements, but also to analyses and studies that relate to commercial planning. These reviews should include market studies, distribution analyses, cost analyses, evaluations of various means of production and studies relating to price and discount structure.

In order to make sound deci-



sions, management should carefully appraise the resources available to it within the company. Only after the capability and availability of personnel and equipment have been determined can management decide how much of these activities can be carried on internally. A common error is to undertake the planning and development phase without the benefit of outside assistance, even though the program requires skills not available within the company.

A large pump manufacturer invented a liquid flow valve that is useful in certain chemical applications. The company was generally well qualified to commercialize the device. After examining the company's resources in the light of planning and development requirements, however, manage-ment engaged outside consultants to: determine design specifications for three important chemical uses; and develop information relating to markets and the most effective means of reaching them.

At the completion of the planning and development phase, the invention should be technically developed to the point of tentative production design, and a program for commercialization should be prepared in detail. Plans for commercialization should be based on answers to at least the following questions:

Production

- 1. Has the optimum method of production been determined?
- 2. Have materials, components, and vendors been selected?
- 3. What are the capital requirements for new facilities?
- 4. What level of production is planned?
- 5. Will an adequate work force be available?
- 6. What are the estimated production costs?

Engineering

- 1. What future modifications are being considered? How much will they cost? Why not make the modifications now?
- 2. Has the invention been adequately tested for reliability and performance?
- 3. Has the design of each part been considered in the light of production costs and procedures? 4. Are there any important technological advances being considered by others in the industry?

Marketing

- 1. What are present and projected sales goals?
- 2. What is the size of the market? Where is it?
- 3. Are there any seasonal factors?
- 4. What is the most effective means of distribution?
- 5. What are industry practices with respect to guarantees and servicing?

(Continued on page 79)

"At the completion of the planning and development phase, the invention should be technically developed to the point of tentative production design . . ."

Working Capital

HOW TO GET IT WHEN YOU NEED

Don't overlook the working funds plan as you search for new ways to solve your firm's money problems. Such a plan can provide the funds you need exactly when you need them — and costs may be lower than other financing methods, as this case history proves.

By David L. Salinger

Director, Industrial Division Walter E. Heller and Co., Chicago

EDITOR'S NOTE: MM continues its efforts to shed light on the various methods you can use to combat the money shortage. Thus we have asked an official of an industrial finance concern to explain and illustrate one of the financing services available through such organizations.

Don't be fooled by the price tag on money. Even in today's high cost money market, the cost of money is less important than what you can do with additional funds-in terms of additional

Let's look at a hypothetical small company worth, say, \$100,000. Assume that if this company were to obtain an extra \$100,000, it could turn it over five times a year, for an additional volume of \$500,000, and earn an additional profit of

\$25,000.

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There are two ways the management of this company could view the situation. First, it could say that using this extra money would provide a return on volume of only

But the second way to look at it would be that the added \$25,000 in profit represents 25% of the firm's equity on \$100,000. It might cost the firm \$6,000, \$12,000 or even more to get the added \$100,000, but on the basis of an added profit of \$25,000, this firm could still be

The point is that it is not always wise to pull in your horns just because money is expensive. Any company that can show sound opportunity to apply extra capital profitably can still find sound ways

to obtain such capital.

What method should you use to finance business growth? That, of course, depends on the specific conditions surrounding your company. It might be one of the conventional methods such as a real estate mortgage, debentures, shortterm loans, stock issues and so on.

One money method that many firms overlook, however, is that known as the working funds plan. This approach has many advantages. It does not involve the restrictions that come with debentures and preferred stock. There is no sharing of earnings or division of management control as with common stock. Furthermore, there is no penalty for a quick payoff of the money you've obtained, and the cost in at least some cases can be substantially less than for a stock issue, for example, as will be demonstrated below.

How the plan works

What you do under the working funds plan is borrow money when and as you need it. You draw out and repay only as much as you need, and you do it on a revolving basis, depending on the fluctuations up and down of your business and the cycle of your money

Working funds can generally be provided by an industrial finance concern within a matter of days after analysis of your needs. Accounts receivable, notes receivable, all or portions of inventories, and machinery and equipment are generally acceptable as collateral.

Thus, when your needs are high, additional funds are available to carry increased receivables and inventories. When your needs are smaller, usage of funds is reduced correspondingly, with no prepayment premium. If activity again increases, the higher usage can be reinstated—and this cycle can be repeated as many times as necessary.

As a simple example of the use of working funds, suppose your payroll is issued on the first and fifteenth of each month, and your suppliers' invoices are discountable on the tenth of the month. Working funds can be obtained on precisely those dates and thus need not lie idle in your bank account.

An actual case

Now let's look at the figures for an actual company that decided to use a working funds plan five years ago. This company is in the 52% tax bracket. Let's also compare its actual figures with estimated figures for the next best financing method the company could have used, a preferred stock issue.

The graph shown here gives the actual amount of working funds supplied to the company on a

THE AUTHOR

David L. Salinger has contributed extensively to business magazines in the fields of construction, machine tools, materials handling, textiles and others.

Director of the Industrial Division of Walter E. Heller & Co., he is known also as a speaker before many technical and industrial groups.

monthly basis over the past five years. Note that the funds used range from a low of \$14,234 (in the twelfth month of the first year) to a high of \$2,395,245 (in the eleventh month of the fifth year). This range illustrates the flexibility of a working funds plan.

Based on a daily average, here are the amounts of working funds employed by the company for each of the five years:

							\$2,900,179
Fifth y	OCIF						1,074,695
Fourth	year						881,767
Third	year						563,073
Second	year	_					209,488
First ye	ear .						\$ 171,156

Now, here are the actual charges the company paid for using these working funds for each of the five years:

After-tax	C	0	5	t	5				157,833	3
									\$ 328,818	3
Total cost										
Fifth year			4				٠		117,876	5
Fourth yea									94,170	
Third year									73,765	
Second year	ır								23,224	1
First year									\$ 19,783	3

Suppose that five years ago this company could have correctly forecast its money requirements, and had chosen, instead of a working funds plan, to finance its needs with a preferred stock issue (the most desirable form of capital issue then available to it). Under these conditions, we can make the following assumptions:

1. Preferred stock in the amount of \$500,000 would have been issued (see dotted line across graph). This would have been more than enough during the first two years, but would have required supplementary bank borrowing for the third, fourth and fifth years.

2. Cost of commission for sale of the \$500,000 preferred issued would have amounted to \$25,000, based on a 5% brokerage commission (not tax deductible). Attorneys' fees, auditors' fees, SEC registration fees, and certificates and stamp taxes would have been about \$30,000 (not tax deductible).

3. With a preferred dividend rate of 6%, or 30% for the five years,

dividend costs would have been \$150,000 (not tax deductible).

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4. In the third, fourth and fifth years, the company would have had to borrow from its bank at an interest rate of 4½% (tax deductible) on 90-day unsecured notes, and with accurate forecasts of maximum needs to handle peak cash usage over the amount of the securities issue with 20% compensating balances.*

Thus, if a preferred stock issue of \$50,000 had been used instead of a working funds plan, these would have been the costs:

PREFERRED STOCK COSTS

Total stock costs	\$ 205,000
@ 6%)	
Dividends (five years	
registration	30,000
Fees and SEC	
Commission @ 5%	\$ 25,000

BANK BORROWING COSTS

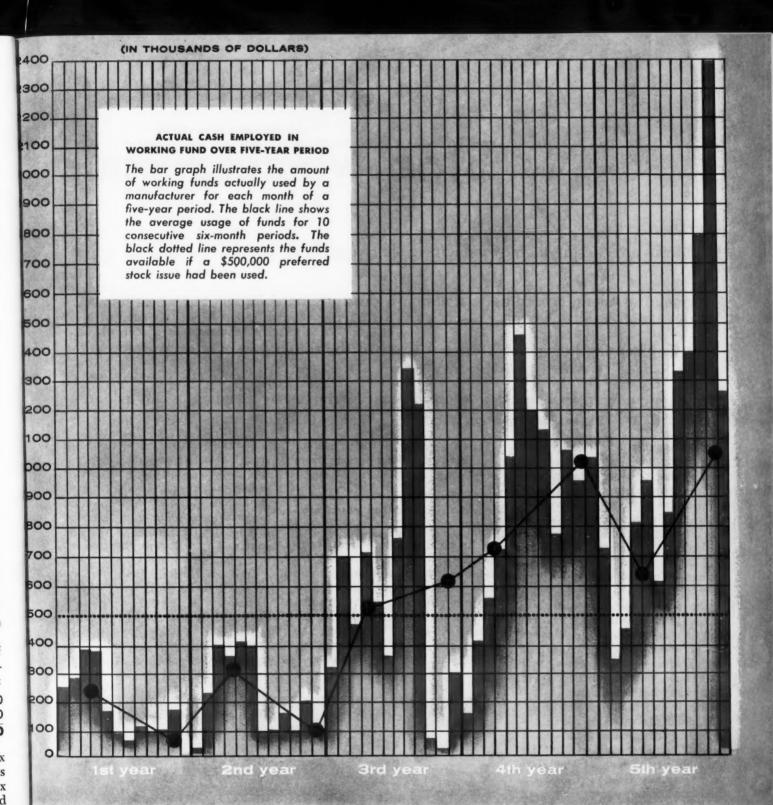
	verage	Interest
First year\$	0	\$ 0
Second year .	0	0
Third year	284,375	17,297
Fourth year .	728,125	32,766
Fifth year 1	,112,500	50,062
Total interest		100,125
After-tax cos	ts	48,060

On this basis, the total cost of the preferred stock (and bank borrowing) finance method would be:

Preferred stock costs	\$ 205,000 48,060
After-tax interest costs . Total after-tax costs	253,060

Thus the total five-year after-tax cost of the working funds plan was \$157,833, as against the after-tax cost of the preferred stock method of \$253,060. It will be noticed that no discussion is given to debenture money in the above comparison. This is because, as is the case with many companies, debenture money was simply not available to this concern: it had not been in business long enough to have established a continuous earning record

e If the company was unable to borrow from the bank on an unsecured basis for peak loads, an adverse effect would be felt on profits, volume, prestige and growth. The example does not take into consideration common stock warrants, an additional cost of a preferred issue of this type, or call premium costs incurred when preferred stock is retired.



and its working capital was not strong enough to support the extent of the financing needed to accomplish this.

Company needs vary

The financial requirements of different companies vary, of course. An analysis of your particular needs, of the solutions available to you under the conditions of today's market, of their relative costs, and of what each alternative will

accomplish for you—these are each necessary before you can make an informed choice that will be of maximum value to your company.

Sometimes you can adapt a specific finance method to match your needs more closely. For example, a working funds plan can be handled through outright purchase of accounts receivable, and thus become a factoring plan.

Regardless of what financing method you use, you can't avoid the fact that it will cost money. However, take a leaf from the successful operation of many companies today that think of their costs, including their money costs, in terms of, "What is the additional profit?" They "trade on the equity," borrowing as much as they can profitably and safely use, and figuring profit not against volume but against their investment—not after tax versus capital and surplus. m/m

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Stop wasting your

Most firms are causing their own engineer shortage. How? Through mismanagement of engineering talent, according to a nation-wide study on company use—and misuse—of engineering personnel. Here are a few of the things you can begin doing right now to increase the output of your engineers by as much as 20% or more.

An electronics firm made an evaluation of the work being done in its engineering department recently and came up with this startling discovery:

Its 122 engineers were doing work that could easily be accomplished by 99 such men. The excess 23 engineers represented an estimated annual salary cost of \$172,500.

The reason for this waste, according to a recently published report, was a common one: the engineers were spending a big part of their time at routine chores that could have been handled by lower paid clerks and technicians.

This is only one of scores of examples on the waste of scarce engineering manpower cited in a heavily documented report by graduate researchers at the Harvard Business School. Based on their interviews, surveys, sorting and sifting of facts, the researchers come to one chief conclusion: most engineer-short firms are contributing to their own woes through misuse and mismanagement of their existing personnel.

Based on their findings, the Harvard group has developed a series of recommended methods for attacking this waste.* Here are a few of the things you can do to get more profit from your engineering manpower:

Spend more time planning work objectives for your engineers.

The creative mind of an engineer should not be regimented. On the other hand, a creative mind that lacks adequate direction is likely to stray into areas of academic rather than economic significance. A middle road can be found, and it's the role of management to find it—through planning.

Horrible example: One company reported that some of its engineers had designed and built an explosion container. The product was a good one; it proved to be almost perfect technically. But because management had failed to plan objectives for its engineering department, much time, money and effort went down the drain. Reason: there proved to be no market for the new invention.

Coordination among departments is a universally accepted function of management, yet it is commonly overlooked when it



^e The findings of the research study, plus recommendations based on the findings, are available in a 162-page report titled Engineering Manpower: How to Improve Its Productivity. The report is filled with valuable tips for any firm making extensive use of engineers. Price: \$18.50. Address Engineering Management Reports, P.O. Box 161, Cambridge 38, Mass.

engineers!

comes to the engineering department. Sometimes management bucks the coordination and planning job off on the chief engineer, who just can't do the job alone—without real help from the top.

While some managements "seem unaware of the necessity for such a procedure," others frankly admit that they have just never bothered to coordinate all aspects of engineering into the over-all picture, even though they know they should.

Says one chief engineer:

"Our engineers continually want to pull one way while the rest of the company is pulling the other. Reconciling the two groups is an everyday worry and takes a major portion of my time."

2. Make sure you have the real picture of what your staff is doing.

Evaluation of engineering work has been called "the part of planning which has thus far received the least attention by management."

It's only through evaluation of engineering work that you can find out how big the gap is between what your engineers are doing and what they are supposed to be doing. Yet many executives seem reluctant to take this look. Says one top administrator:

"I recognize the need for work evaluation, but for us it's just not practical; we are always behind schedule, working overtime, and too pressed to take the time that this would require."

What this executive doesn't realize is that his lack of evaluation could very well be the cause of his problems.

Positive approach: When you evaluate the engineering work being done in your company, don't do it on the basis of each individual engineer's abilities or production level. Instead, do it in terms of how



each individual project fits into your firm's over-all plans.

It's obvious that an evaluation of engineering activities is going to be no better than the ability of the man doing the evaluation job. So don't delegate this function down the line. Assign it to a top man who understands engineering problems and who can work closely with (and win the cooperation of) the chief engineer.

3. In engineering work, scheduling is an economic necessity.

A survey of firms around the country shows that there is no middle ground when it comes to scheduling of engineering projects. Either firms tend to do a thorough and thoughtful job of scheduling, or they do no scheduling whatsoever. The difference in result under the two sets of circumstances is

usually pronounced. Positive example: One small firm has set up a Project Specification Committee. This is a top management group (including both the president and chief engineer) which approves and schedules all work for the engineering department. Each engineer then submits a weekly report of his progress and and problems, first to his own superior, then up to the Project Specification Committee. Review of these reports by the committee serves a dual purpose: it provides top management with an intimate and continuing picture of what is happening in its engineering department, and gives the individual engineer a sense of direct contact with the firm's management people.

In another firm, a disgruntled chief engineer has reported that when a project is handed to him by management he merely passes it along to any engineer who happens to be free at the time. The projects, he complains, are seldom passed along to him far enough in advance to make any kind of work budgeting possible.

4. Be ready for those crash projects before they happen.

You'll never overcome emergency engineering projects completely. But you can be ready for them, and reduce their cost, through pre-planning.

Positive approach: One way to pre-plan for crash projects—and a method that a number of firms have used successfully—is to set up a special team to handle the unforeseen problems. This special group of engineers can be assigned work on low priority projects, and thus is always on tap to plunge into an emergency situation.

Some executives, of course, feel crash programs have definite advantages; they welcome them rather than trying to avoid them. Says one such management man:

"I like to see crash projects come up. They get my people on their toes."

5. Provide your engineers with real leadership

If your engineers aren't being supplied with the leadership they deserve, you can be sure they are aware of the shortcoming—and suffering from it. One of them voices the problem this way:

"The goals may be well chosen, the men may be well assigned, but the full capacity of the men may not be tapped because the leader fails to build an atmosphere of enthusiasm and cooperative ef-

Startling signpost: About half of the engineers working in industry today feel they are not being kept informed about their own personal professional progress. Some supervisors don't want to criticize or explain how a job should be done for fear of upsetting morale or retarding the creativity of their engineers.

It's axiomatic that the direct superior—be he chief engineer or project supervisor—is the one to provide leadership for the men working under him. But what happens if the superior is not qualified to handle men in a leadership capacity, or to lay down objectives in specific terms? Obviously, the work of individual engineers is going to suffer.

Why are so many engineering managers and supervisors weak in human relations? The blame for this can be laid directly at the door of top management for failure to take the time or trouble to 1) select the right engineering managers and supervisors, and 2) train

them in the skills of getting things done through other people.

It's still a common practice in industry today to fill management, supervisory or administrative posts in the engineering department with the men who show the strongest technical ability. The result is that excellent engineers are constantly being pulled out of the jobs where they can contribute the most and shunted into supervisory positions where they can contribute little, because they do not possess other than engineering qualifications. In most engineering management posts, it is the human relations and administrative skills that are of primary importance; technical ability rates second.

This does not mean that an engineer can't make a good manager and leader. Many engineers make excellent raw material for managers; their disciplined thinking, objectivity and creativity give them the basic abilities for planning, coordination, organization and other management work. But to convert an engineer into a manager and leader calls for training -real training. Without sound selection and training programs, you're not only doing your company a disservice by promoting an engineer to a supervisory post, but you're doing the engineer a disservice too.

Says one engineering executive: "I see no reason for engineers to take part in management any more than research chemists, accountants, or others, except as they have demonstrated management ability and are willing to accept the responsibilities of management. It is always fun to participate in management affairs but it is not our purpose to provide entertainment. We want ability. Whenever employees demonstrate the ability, we are glad to consider them for a management assignment."

Give more than lip service to communications with engineers.

Communications is one of the biggest jobs the engineering manager or supervisor must do. His job is to bring management's ob(Continued on page 72)

Here's what a computer is and what it does

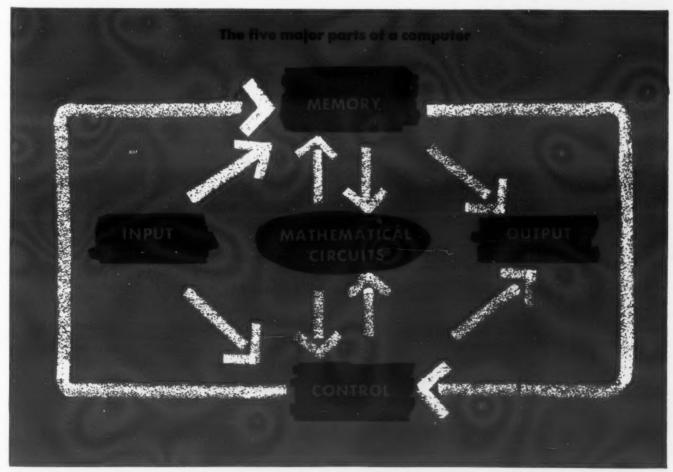
Busy top executives are sometimes left in the dark by technical reports of new developments in electronic data processing. The reason is that they've never had occasion to gain a basic understanding of the fundamentals of electronics for business. If this is your problem, this article is for you. In simple terms it reveals the workings and uses of a computer. And it may help you determine whether a computer could serve an economic need in your own firm now.

By Ernest Koenigsberg

Midwest Research Institute Kansas City, Mo.

There's nothing very complicated in the calculations performed by an electronic computer. In fact, it does nothing that a nine-year-old can't do.

Basically, a computer is a device that will carry out simple mathematical operations very quickly. For example, if put into words: "Add 2025 to 1765," or, "Subtract 2925 from 4025," or, "Subtract A



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from B; if the difference is zero or greater, go on to the next step; if the difference is less than zero, then set (B-A) equal to zero."

These are precisely the same operations carried out by clerks using desk calculators, slide rules, or just

pencil and paper.

A part of the fascination of computers lies in the great speed at which the individual operations are performed, but the appellation of "electronic brains" is due to two more factors:

Computers are able to memorize or store large amounts of information, which can later be quickly recovered as needed for the mathematical steps.

"pro-Computers can be grammed" or organized in advance so that many different operations will be performed, each one in its proper sequence.

Altogether, a computer is made up of five major parts, interconnected as shown on page 45.

Input: A computer must have information in order to perform its operations. Such input may be in the form of punched cards, paper or magnetic tape, or typewriters (for example, the Teletypewriter or Flexowriter). Newer input devices include special handsets, information direct from cash registers, or on paper or card tags which can be read magnetically or electrostatically. Depending on the circuits used, input devices feed information to the memory and/or to the control or program circuit.

Memory: Input devices tend to work more slowly than the circuits performing the actual mathematical operations. It is, therefore, an advantage to be able to store as much as possible of the information which is common to a number of calculations. The operation of a payroll, for example, requires a list of employees, their job classifications, tax classifications, pay schemes and rates, etc. A sufficient memory ensures that such more or less fixed information does not have to be re-entered into each separate calculation, and thus increases the speed of the computer as a whole.

Memory devices currently in use include magnetic cores, cathoderay tubes, vacuum tubes, acoustic delay lines, magnetic drums and magnetic tape. The most impor**Case History—Airline Reservations**

Computers can be used to provide information vital to the operation of a business, as this Trans-World Airline experience demonstrates.

An unoccupied seat on a departing plane means revenue that is lost forever, but space sales exceeding plane capacity results in resentments and bad public relations.

TWA, faced with this dilemma, commissioned Midwest Research Institute to answer the question, "Can modern computers aid in the operation of the reservations and sales departments and provide a means for maintaining or increasing our standard of service?"

Analysis of reservation and space recording operations was followed by collection of information on available and contemplated electronic data processing equipment. Finally, evaluation was made of such equipment in terms of TWA's requirements, effectiveness of the communications system, and both installation and operating costs.

tant property of a memory device is the time it takes to release information to the other circuits in the computer. This is known as access time, and the above list is in order

of increasing access time.

Control: The control circuits are responsible for putting the mathematical operations into their proper sequence and for selecting the proper information from the memory. Some computers are "stored program computers," meaning that both the program (or sequence of operations) and all the necessary information are stored in the memory unit. Control information then goes directly from the memory to the control circuit. Other computers are internally wired to perform a given sequence of operations, using both input and memory information. Still others rely on input cards to give the sequence of operations.

Mathematical circuits: The mathematical circuits are the "heart" of the computer; they alone can manipulate the information to obtain the desired results. They incorporate either vacuum tubes or crystal valves, which operate in response to short electronic signals called pulses. Pulses are, in fact, the means of communication between all the components of the computer.

Output devices: Output devices are necessary to produce the re-

quired information in a form that is meaningful to the user. Output devices may take any of the forms which are used for input, or can be direct printers. In the latter case, the output, if in tape or card language, can be fed to an auxiliary machine, which prints the results at reasonable speeds without slowing down the computer. Alternatively, the output may actually be desired in card or tape form so that sorting operations can easily be performed. This is particularly true if more than a single answer is required, e.g., when a report or statistical survey is to be compiled.

How computers work

Computers are capable of performing a host of different complex operations at amazing speeds and of storing masses of information. But it is up to the programmer to tell the machine just where the information comes from, what is to be done with it, and where the information is to go, e.g., back to the memory or on to the output. The efficiency of a computer in dealing with a particular problem depends to a large extent on the skill of the programmer. °

Computers understand and op-

[•] There are some computers, called "special purpose computers," which are programmed by internal wiring. These are capable of carrying out only very specific operations; the program is built into the computer. Two examples are the American Airline Reservisor and the John Plain Inventory Computer.



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(Circle number 294 for more information)

Here's what a computer is (Continued)

erate by using a code language for communication both with the outside and between their component parts. The programmer has to convert all source data into the machine language and then prepare the instructions for the computer. The instructions, which are also in the code language, tell the machine the sequence of operations, the output information required and the form it is to take (e.g., card or printed output.)

Programming is a taxing and tedious job; if it is to be done well, the programmer must know the capabilities of the computer. For example, knowledge of the length of the access time can be used advantageously. Proper programming, called "optimal coding," can reduce the time taken for a particular problem by a factor of five. It may even be possible to produce a working program for a problem which at first seemed impossible owing to the memory limitations of the computer.

Since it requires so much time and effort, programming tends to be expensive, and it is therefore not often economically sound to plan a "single run" problem for the computer. The actual computer cost of performing the calculations may be very low, but the operation may require weeks of effort on the part of the programmer.

It should be remembered that a computer requires a staff of operators, programmers, coders, clerks for data reduction, and a maintenance staff (the last named supplied by the manufacturer if the machine is rented). While computers can and do reduce staff requirements, they do not do away with staffing problems altogether.

Can a computer help you?

Is there an ultimate advantage in applying a computer in your business? The advantages may be direct-lower payrolls or, better still, lower net operating costs. Less obvious advantages may be obtained if a computer gives faster and more accurate reporting at the same or even higher costs, or if it provides the business with

vital information which was previously unobtainable (see box p. 47).

For a system to be truly efficient, the computer must be used in its most effective way commensurate with the needs of the user. There is a wide range of commercial computers, each with somewhat different characteristics, and many manufacturers are prepared to build special computers for customers' needs. There is no need to give up information to fit the method to a particular machine, or to make the machines follow the existing method.

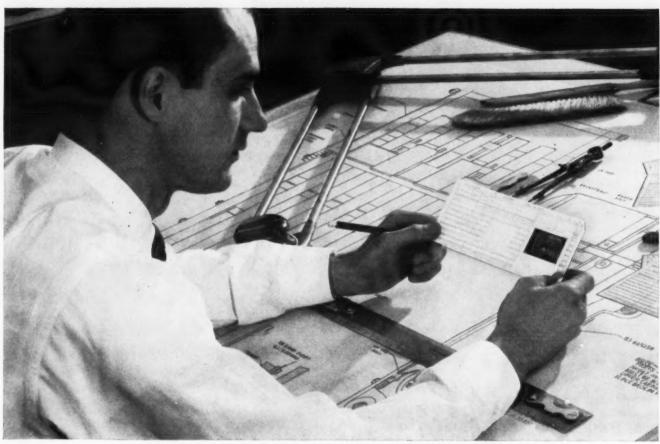


ABOUT THE **AUTHOR**

Dr. Ernest Koenigsberg, a graduate of NYU and Iowa State, is head of the Operations Research Section of Midwest Research Institute, Kansas City. In addition he works with the Computing Service Section in studies of the application of computers to data processing. His computer experience, at Midwest Research as well as other organizations, includes studies of such fields as inventory and production control, work scheduling, and reservation and ticketing.

It is possible to make quite accurate estimates of the potential and costs of a computer in a particular application or group of applications. These estimates can, of course, be only as accurate as the detail and scope of the analysis permits. The study should therefore include a complete survey of the system in terms of the goals and demands. Since a computer does only what it is told to do, it adds no knowledge or insight to the routines that it processes. Very often, therefore, if a computer is used merely to carry out the existing procedures in their present sequences, it will prove to be more expensive and/or slower than the existing methods. It is quite possible for a mere simplification of





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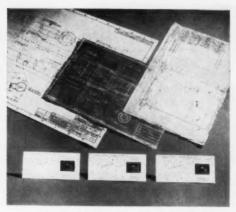
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Here's what a computer is (Continued)

existing routines to lead to greater reduction in operating costs than can be obtained by the introduction of today's computers. Several such instances have been reported. At other times, the analysis has shown that present volumes of business are too small for the use of the larger machines, while the intermediate size machines offer no savings.

Some computer applications

The earliest use of modern computing methods in industry was in scientific and technical applications. There is, however, a "scientific" use of computers which is of immediate interest to management and which should be dealt with together with the more commercial applications. This is the use of computers in Operations Research, the name given to the use of scientific techniques to assist in the solution of management problems. Since Operations Research attempts to aid management by using many methods and techniques which have been developed in other branches of science, it often requires the solution of mathematical equations.

A computer will provide the answers to complicated mathematical problems involving a large number of variables, which were once considered too difficult or tedious for solution. By using computers, Operations Research can now solve such problems as are associated with inventory and production control, warehouse allocation and other distribution headaches.1

Other problems for which a computer often provides solutions are those which may be too difficult for mathematical formulation. By reproducing the elements of the problem, it is possible to create a mathematical/statistical model of the system under study and to obtain trial results using the actual statistical distributions. This approach, which is called the "Monte Carlo Method," has proved useful in improving the efficiency of freight yards,2 terminals and production facilities.

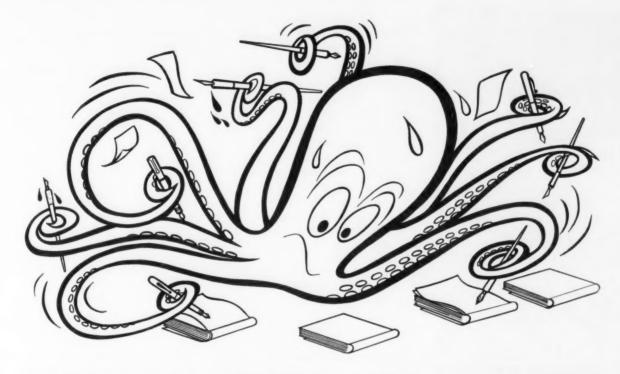
The computer allows problems

which were once considered too formidable, to be studied in almost complete detail. The problems of scheduling orders in a machine repair shop or of the flow of petroleum products through a pipeline fall into this category. The computer can treat the extreme variability in repair orders or in petroleum demands, and make decisions that will take account of changes in the plant or changes due to "failures" in machinery or personnel.

Modern computers are being used in many commercial and accounting phases of business and industry. A typical example is provided by payroll accounting. The size of the machine required depends on the number of employees concerned, the complexity of the wage system (taxes, other deductions, incentive, piece or time rates), and the other uses to which the machine will be put. General purpose computers are also being used for many other commercial operations: to perform many accounting functions, including billing, invoicing, etc., and to prepare control reports for management.

Some large companies use several small or intermediate size computers, each performing a specific function. Others are planning to use a single large computer to fulfill many functions.3 There is much to be said for both approaches; the actual decision, of course, depends on the outlook and plans of the company involved and on how the various functions are related.

Special purpose computers are being used to perform special functions, which are generally of the "on-line" type. These require immediate access to information stored in the machine and the ability to keep the information up-todate. The booking of reservations is one example of an "on-line" operation. Railroads and airlines sell a product that has a high value until the train or plane departs: after that, the space has no value at all. Overselling space may, at times, be even more costly than leaving a vacant seat. A computer exists which will keep an up-to-the-



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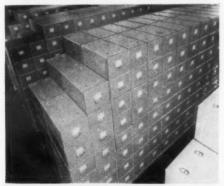
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Here's what a computer is (Continued)

minute record of available space,⁴ and the inventory record is corrected immediately after space is sold. Other computers are being used to maintain up-to-date inventory records in the shoe industry, in production assemblies, of spare parts in a plant⁵ and in certain departments of large stores.

Work is now in progress to develop a point-of-sale input device in direct communication with a large inventory computer. This has great potential in large department stores and wherever largescale warehouse and spare-part operations are conducted. It is hoped that this device may prove workable in smaller firms, which are perhaps in greater need of improvements in accounting and control. A bank computer for reading information from checks and other commercial papers, and keeping up-to-date account records, has been reported.6 This computer reads magnetic information off the returned checks, and an operator adds certain other information for the machine to record and manipulate. Several manufacturers are developing input devices which can read printed information from checks, tickets, invoices, etc., and convert it into machine language for manipulation by the computer.

Looking at the problem

Studying the potentialities of computers in a business requires a great deal of time and effort. The planning group preferably should consist of a few company personnel, who are responsible for the operations to be examined, together with one or two people who are thoroughly familiar with the characteristics and capabilities of computers. If there are no company personnel who are familiar with data processing, a consultant may be called in, or company personnel may be trained. There is a mass of literature available on the subject, and excellent training courses are given by many universities and computer manufacturers. Further, since the staff who will eventually operate the system will require specific training anyway, the planners can participate in an

internal training program under the direction of those who have had computer experience.

At the very outset, the planning group should determine what is expected of the computer. Clear analytical thinking at this stage will lead to simplifications which will be of great advantage, whether a computer is eventually installed or not.

An analysis is required of the information flow and manipulation, not in terms of present practice but of the most efficient operation. The planners are thus looking for duplication, unnecessary steps and bottlenecks in processing. This is best done with the help of flow charts, which are more meaningful than organization charts, since they describe what is actually done in each department, and how the various departments communicate with each other. The flow must be analyzed in great detail to obtain a complete description of what is the essential information, how it is changed en route and what the sequence limitations are, if any, Personal interviews with heads of departments are required to determine what is done with the information at each stage, and the extent to which it is really needed.

Once this has been done, the planning group is in a position to consider modifications to the flow chart. Any duplication of effort will be apparent and should be removed; changes in sequence should be made where they will save time and/or personnel. The knowledge of computer techniques now becomes useful. The group can consider revisions of method and sequences which are in accord with computer techniques. This extends to a consideration of more direct methods of feeding input information and of the form of the various output reports.

The work of the planning group should be carefully scrutinized by high level operating personnel, to ensure that no vital reporting is omitted.

Selecting the computer

The planning committee is now in a position to consider the selec-



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Here's what a computer is (Continued)

tion of the computer. By this time, a complete library of computer handbooks and catalogues has been collected, and the group is already familiar with the characteristics of the major computers. It is often wise to consult the manufacturers direct, since they can be very helpful regarding the most recent developments and modifications in equipment.

The manufacturers are interested in all possible computer applications and in any special requirements; to a large extent, the needs of the customers determine the revisions made in later models. Further, their engineering and sales staffs have valuable experience in installing computer systems which they are more than willing to put at the customer's service.

In comparing different computers, the factors to be considered are flexibility, ease of operation and reliability and maintenance, as well as cost, speed and input and output devices. In general the computer selected should be able to handle reasonable overloads to allow for seasonal fluctuations and the expected growth in business volume. Alternatively, it should be capable of being coupled with extra equipment to handle these overloads. Very often, however, the overload can be handled at very low cost during an added shift. If the computer is expected to give "on-line" service, it must of course be able to handle the overload directly. The planning group must therefore consider the anticipated growth in volume, at least for the amortization period if the computer is purchased outright, or for the contract period (plus an amortization factor for changeover costs) if the machine is rented.

The justification of a computer requires the same sort of analysis as is needed for the justification of any capital investment in a business organization. The costs, advantages and disadvantages of both the old and the new methods of operation must be compared and assessed. When a system is changed, there are always certain

conversion costs which must be attributed to the new system. These include the retraining of personnel, dismissal costs, waste of the stocks of older printed material, etc. In some instances the conversion cost will be quite high, perhaps on the order of six months' machine rental.

The cost of the old system is presumably known in great detail. At this stage, good estimates of the running costs (including maintenance, personnel and forms) of the new method should also be available, together with an estimate of the capital costs. In a period of rapid change, such as is now in progress in computer development, one must consider a short amortization period for purchased equipment, say five to seven years.

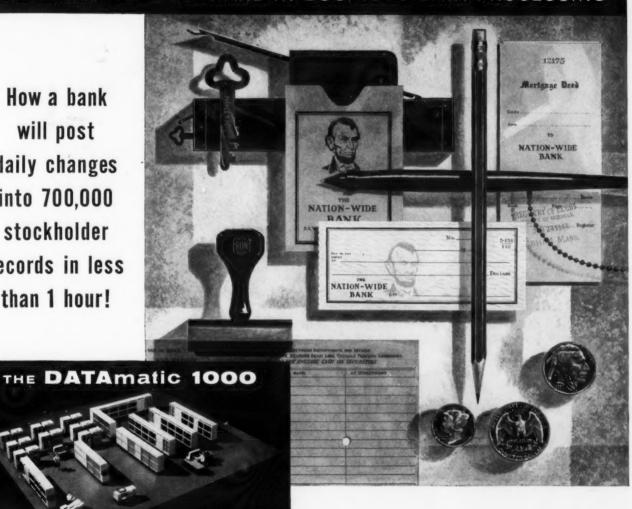
If a computer system is to be justified on the basis of money savings alone, then the cost estimates should show savings over such a short period. This does not imply that the system will be outdated at the end of that time; it merely takes into account that new developments may allow even greater savings in the future.

Some potential users are taking the attitude that, in view of the rapid developments in the computer industry, they will wait for a computer that is absolutely "ideal" for their needs. While they may eventually get a machine which they consider ideal, they will not be making use of the advantages and possible savings available now, and may fall far behind. It is only by considering computers now, and making his needs known to the manufacturers, that the potential user can help formulate the characteristics of future computers. Further, both management and staff will be familiar with computer techniques and methods, and will be in a better position to take advantage of the inevitable developments. m/m

(1) Proceedings of Conference on R. R. Communications, Railway Systems and Procedure munications. Railway Systems and Procedure Association.
(2) R. R. Crane, F. B. Brown and R. O. Blanchard, Jnl. Oper. Res. Soc. Am., 3, 262 (1955).
(3) R. F. Osborn, Sales Management, February 1955.
(4) M. L. Haselton and E. L. Schmidt, Electrical Engineering, pp. 1-6, July 1954.
(5) Electronics, p. 20, August 1955.
(6) Automatic Control, p. 29, November 1955; Electronics, p. 20, August 1955.

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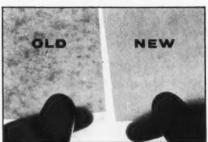
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MANAGEMENT METHODS

How to get action from a group

People working together is the basis of most business action now. But

how can you tell which people will work best together?

Here are the results of a research study that points to the answers.

It is an unquestionable fact that some executives work well together, others don't. How to predetermine productive working partners is a problem facing a growing number of administrators, particularly those in firms where committee decisions and group effort have become a management necessity.

A study conducted by a Harvard

psychologist provides some helpful guides. An application of his findings will help you in organization planning and in selecting men for group-action projects.

The psychologist is William C. Schutz. As a result of his research he has developed a series of tests called Fundamental Inter-personal Relations Orientation (FIRO, for short).

More than just a personality evaluation, FIRO is designed to assess the compatibility of any group of men. How well, for example, will he get along with others on a small committee? By pretesting individuals and then deliberately throwing them together in both compatible and incompatible committees, Schutz has demonstrated that compatible com-

WHICH ONE DO YOU WANT ON YOUR COMMITTEE?



The need for group effort and committee decisions makes it desirable that you choose men who can work well together around the same table.

DS

mittees accomplish more work more quickly than incompatible committees of equal intelligence.

Obviously, then, when you have a business problem that requires committee action, a solution will be arrived at more rapidly if the committee is selected on the basis of how well the individuals get along together.

Tests for good teams

How do you go about finding out which men in your organization are best suited to work together? Dr. Schutz's procedures suggest a number of questions you can ask yourself about each man. Basically, these questions are designed to probe into three fundamental areas of human psychology. These are:

Affection: How important is it for the person that he be liked? Is he genuinely friendly, over-friendly, or unfriendly?

Independence: How strong is the person's desire for rules and authority? Is he submissive, rebellious, or capable of accepting or rejecting authority as each course is appropriate?

Inclusion: Does the person feel that other people are genuinely interested in him? How does he feel about being included in the group? Does he participate a great deal, moderately, or not at all?

So far, the experimental work has shown that the first area—affection or emotional response—has the strongest bearing on group compatibility. The more similar individuals are concerning their needs in this area, the more compatible the group will be.

Three types within the emotional response field have been designated as "overpersonal," "personal," and "counterpersonal."

The overpersonal individual wants, above all, to be liked. Everything is secondary to that overpowering need. Thus the overpersonal man will act in a manner calculated to please most of the people most of the time. The work to be done by the committee is less important to him than winning the approval of the group.

Tests mark reactions to group situations

FIRO tests have been administered to Harvard students, Navy enlisted men and—by Arnold Abelow, one of Dr. Schutz's students—to the members of a Boston street gang who had been "working together" for several years.

The FIRO tests include a series of written questions which reveal the feelings and actions of individuals in a variety of group situations. A 10-minute self-description questionnaire is employed.

Objective tests have been used to check the validity of the questionnaire itself. These include logical puzzles, group construction of toys with parts and diagrams provided and a "war game" similar to chess, in which pieces

on the board represent aircraft. One group's planes defend an aircraft carrier, while the other group attempts to sink it. In these contests, each group must decide on its move within 30 seconds. Under these pressures, teams made up of compatible members have been found to beat incompatible teams 86% of the time.

With common-sense adjustments for situation differences, FIRO tests can be applied to many routine business problems. Caution should be employed, however, since the mere fact of compatibility in a group, permitting it to arrive at decisions quickly and easily, does not necessarily guarantee that the conclusions so reached are always correct.

At the other end of the pole is the counterpersonal man. This man cares little or nothing for the personalities involved in the group. He withdraws from personal relationships and frequently is considered a cold fish. He is concerned solely with the assigned task; he concentrates on what is being done, not on who is doing it. He is unconcerned with others' reactions to his "all work and no play" attitude.

In the middle is the genuinely personal man. This man is relaxed in his relations with other people; he feels no overwhelming need to seek approval from without, or to insulate himself against possible disapproval.

In selecting members of a committee, the personal man can always be included, while either the overpersonal or the counterpersonal individuals may occupy the remaining chairs. Trouble starts, however, when both overpersonal and counterpersonal men are asked to work together.

Each type unconsciously desires a different committee relationship;

each attempts to establish different work methods. As a result, the members' time and emotional energies are wasted on adjusting to each other, instead of concentrating on the assigned task. Occasionally, instead of an adjustment, open conflict results, and the committee finds it impossible to function effectively.

When selecting men to serve on a committee, or to work together in any other way, the executive should look beyond the surface and ask himself whether Jones is really a hearty, friendly man, or simply a superficial glad-hander who appears friendly towards all but is, in reality, close to none. Does Smith participate freely in discussions, expressing his own ideas, or does he remain silent unless to criticize or agree with a suggestions put forth by others?

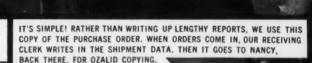
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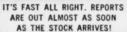
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Industrialists who have investigated Orlando have been aware of this planned progress and, with climate as an extra inducement, have chosen Orlando as their point of action.

These growth companies in Orlando include the Martin Company; Combustion Engineering, Inc.; the Gas Processing Division of the National Gas Cylinder Co.; Aerojet-General Corp.; and Radiation, Inc. Satellite industries and services have followed. Other companies such as Florida Fashion and Tupperware Home Parties, Inc., have been successfully established here for several years.

If your company is planning to expand to the South write to the Orlando Industrial Board for Industrial site information.

ORLANDO INDUSTRIAL BOARD

Room 14, City Hall, Orlando, Florida

New examples in tax reduction

EDITOR'S NOTE: A year ago "Management Methods" published a few representative samples from the book, "Working with the Revenue Code in 1956." This fact-filled little book was published by the American Institute of Accountants. It consists of a collection of over 200 topically indexed tax tips selected from "The Journal of Accountancy's" Tax Clinic. Now the AlA has brought out a new edition of the book, expanded in content by 50%, and titled "Working with the Revenue Code—1957." Valuable as a reference guide, this volume can also be used as a source of ideas for tax-savings. Here are some excerpts.

WORKING WITH THE REVENUE CODE—1957, edited by James J. Mahon. American Institute of Certified Public Accountants, 270 Madison Ave., New York 16. 1957. 192 pp. \$3 cloth; \$2.25 paper

Increasing common stock interest of corporate officers

Reshuffling may be accomplished as tax-free recapitalization.

T. T. Shaw, CPA, Arthur Young & Company, New York City, points out that under proper circumstances, a recapitalization may be used as a tax-free method of increasing the common stock interest of corporate employees active in company management. Example: X Corporation has outstanding 1,000 shares of no par common stock. A owns 300 shares, B owns 560 shares, and C, who is not active in the management of the company, owns 140 shares. A, the most active corporate officer, is dissatisfied with his proportionate interest and B agrees that he should have an approximate 40 per cent common stock interest. Accordingly, the charter is amended to permit the issuance of \$100 par, 4% preferred stock. A sufficient number of B's and C's shares of common stock are then exchanged for the new preferred stock to give A the desired 40% common stock interest.

In 1954 the Revenue Service ruled (Rev. Rul. 54-13) that this exchange was tax free under the 1939 Experienced tax authorities tell you how they've handled problem cases under the Tax Code. Compare your practices—and your interpretations—with theirs.

Code. The Service expressly refrained from ruling on side issues, such as whether the exchange resulted in payment of compensation or the making of a gift.

Under the 1954 Code the exchange would appear to be likewise tax free. However, the new preferred stock may be "Section 306 stock." Under the new Code, Section 306 stock, on later sale or redemption, with certain exceptions, gives rise to ordinary income. One exception is a later sale by the estate of a deceased stockholder, as stock passing at death loses its character as Section 306 stock. Hence, classification as Section 306 stock would not be injurious if the stock were retained until the death of the stockholder.

Substitution of debt for equity in recapitalization

(From Tax Executives Institute's 1955 Conference)

Recapitalizations involving a substitution of indebtedness for equity occasionally were held to be tax free under prior law.

However, there is grave doubt that the same result can *ever* obtain under the 1954 Code's provisions—particularly since exchanging stockholders are taxable up to the fair market value of any increase in the principal amount of securities received over the principal amount of securities surrendered (Sec. 356(d)(2)(B)).

Don't lose a subsidiary's operating loss carryover

The tax-free liquidation of a subsidiary may preserve its expiring loss carryover.

This admonition comes from Gordon J. Nicholson, CPA, Arthur Andersen & Co., Chicago.

Parent corporations with subsidiaries which have a continuing record of operating deficits and which are not likely to have earnings in the near future should consider a tax-free liquidation or merger of the subsidiaries in order to utilize the subsidiaries' unused operating losses against the parents' current taxable income. This is especially important where a large portion of a subsidiary's unused operating loss is about to lapse due to the five-year carry-forward limitation.

Timing of the liquidation or merger is important because the transaction must be consummated not later than the end of the fourth taxable year after the year in which the loss arose in order to utilize fully the unused carryforward under Section 381.

For example, assume the following taxable income

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or losses for B Company, a subsidiary of A Company, since its organization on July 1, 1952.

Fiscal year ended June 30	Income (Loss)
1953	(\$100,000)
1954	10,000
1955	5,000
1956	(5,000)

Assume further that it was near the end of the company's 1957 fiscal year and management knew that the result of operations for 1957 would be a loss. The company was not expected to do much better in

the 1958 fiscal year.

It was quite evident, then, that a large portion of B company's 1953 loss would never be used to offset taxable income since it could not be carried beyond 1958, and B would not have sufficient earnings to utilize it by that time. In this situation, the parent, A company, should consider liquidating or merging the subsidiary (tax free) in order to utilize the subsidiary's

The latest date on which the transaction could have been consummated without losing any portion of B's 1953 loss was June 30, 1957. Consummated on that date, B's unabsorbed 1953 loss could be utilized (to the extent of A's taxable income) for A's fiscal year ended June 30, 1958.

Deferred compensation plansa new arrangement

Clearance by the Service might be desirable to assure tax deferral under this type of arrangement.

From time to time, directors of small companies consider deferred compensation plans for executives to provide income after retirement. Ideally the plan should provide the retired executive with adequate security to assure payment but should not create a nonforfeitable right to any sums of money. Paul F. Icerman, CPA, Icerman, Johnson & Hoffman, Ann Arbor, Michigan, suggests that the following method may achieve the desired result.

Suppose Mr. B, employed by a small company he does not control, is being paid a salary of \$25,000 plus a bonus which averages \$15,000. He is 55 years old. He now enters into a 10-year employment contract which provides that his annual salary shall remain at \$25,000 but that the bonus will be payable in monthly installments for 10 years beginning at age 65 when he plans to retire. This would mean that at his retire-

ment, the company could owe him \$150,000.

At the time of the employment contract the company would enter into a trust agreement with a trust company. This agreement would cause the company each year to deposit with the Trust Company a sum equal to the amount of the bonus payable to B. All income from the funds in the trust would be payable to the company in annual (or oftener) payments. On the date when B becomes 66, one-tenth of the total principal sum will be repaid to the company, this to continue annually until the fund is exhausted. The company, in turn, is to disburse such payments to B, when it would be entitled to deduct the payments annually.

The trust agreement would provide further that in

the event the company defaults on any deferred compensation payment to B under his contract, B may call upon the trustee to reimburse him. The trustee would notify the company that it had notice of default. If the default were not remedied within a suitable period, the trustee would make the payment to B, except, if the default occurred on the last payment.

Mr. Icerman believes that this arrangement may give B adequate protection without causing him to be taxed at the time the trust deposits are made. B would seem to have no rights in the trust, present or future—since it merely provides a collateral fund to assure performance of the contract.

However, in view of the Treasury's long-time insistence upon the imposition of substantial conditions, this new type of plan ought to be cleared with the Treasury to assure safety in its adoption.

Don't overlook the revocable trust

(From 1955 New York University Tax Institute.)

In the eagerness of estate planners to save taxes, some old-fashioned advantages of the revocable trust may be overlooked.

Assume that the grantor places property in trust, reserving the full right during his lifetime to change the terms of the trust or revoke it completely. The property will be included in his estate for purposes of the estate tax. However, it will not pass under his will and will not be subject to the various fees and expenses attaching to property in the estate.

There may even be an income tax advantage from the enjoyment of a stepped-up basis derived from the value at the grantor's death, rather than some lower original-cost basis where property is transferred by gift.

U. S. capital gains tax offset by foreign tax credit

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U.S. citizens residing in Canada, please note!

Jerome B. Bachrach, CPA, Bachrach, Sanderbeck & Co., Pittsburgh, observes that the foreign tax credit computation under Code Section 904 can afford some interesting results.

Assume that a United States citizen is a permanent resident of Canada. He has formed a number of corporations from which he draws substantial salaries which qualify as "earned income" as defined by Code Section 911 (b). These salaries are taxable in Canada, but are exempt from United States tax under Code Section 911 (a) (1). He would like to liquidate these corporations.

Ûnder Canadian tax law he will thereby incur no tax. If the Canadian tax on his salaries during the year of liquidation exceeds the United States capital gains tax on the liquidation, no United States tax will be payable, even though the capital gains will, of course, be includible in his United States return.

Such gains are considered to be income derived from Canada even though they are not subject to Canadian tax (GCM 22556). Revenue Ruling 54-15 concedes that the Canadian taxes paid on the salaries may be used as a basis for credit against United States tax even though incurred in Canada on Canadian income exempt from taxation in this country.

(Continued on page 66)



(Circle number 314 for more information)





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(Circle number 313 for more information)

The use of treasury stock . . .

While proposed regulations would have attempted to tax a gain to the corporation in the transaction here described, Final Regulations Section 1.1032-1 (a) does not.

Treasury stock which has appreciated in value can now be used to pay salaries or bonuses to employees without gain to the employer corporation. The employee, of course, is taxable on the fair market value of the stock received. The employer corporation's deduction for compensation also is based on the fair market value.

However, 1954 Code Section 1032 precludes the recognition of gain to the corporation on the issuance of the Treasury stock.

Offsetting capital gains

(From AICPA's 1955 Tax Conference)

Assume that a taxpayer corporation has a capital gain on investments amounting to \$50,000. The capital gains tax on such amount would be \$12,500. If the taxpayer purchases a stock just before it goes ex-dividend, the taxpayer may, by selling it immediately thereafter, realize a capital loss, probably to the extent of the dividend. If such dividend amounted to \$50,000, the capital loss on the sale of the stock would offset the \$50,000 capital gain and the taxpayer would pay a tax of only \$3,900 (\$50,000 less 85 per cent, or \$7,500, x 52 per cent), as compared to \$12,500.

The only hitch is that the stock's drop in value may not be exactly equivalent to the dividend. The varying factors affecting stock market prices create an additional element of risk in the above transaction.

Converting future income into current capital gains

This acceptable method of tax minimization is also available to unincorporated business interests.

The prohibitively high surtax rates are the common foe of most high income earners. Thus, businessmen devote as much thought and effort to converting ordinary income into capital gains as they devote to actually increasing their earnings.

One method of converting *future* ordinary income into current capital gains is to sell off minority chunks of a new business shortly after the business has become sufficiently established to reflect potentially high future earning power.

Indeed, the business need not necessarily be incorporated—it may be an individual proprietorship. Thus, an individual in a service type of business, for example an advertising agency or an accounting practice, might be able to develop it sufficiently within a short time to portend the likelihood of high future earnings. At that point the sale of, say, a 10% interest in the business to an employee will yield capital gains income. Indeed the proprietor's prerogative of management need not be relinquished—he can sell up to 49 per cent of his interest without losing control. m/m

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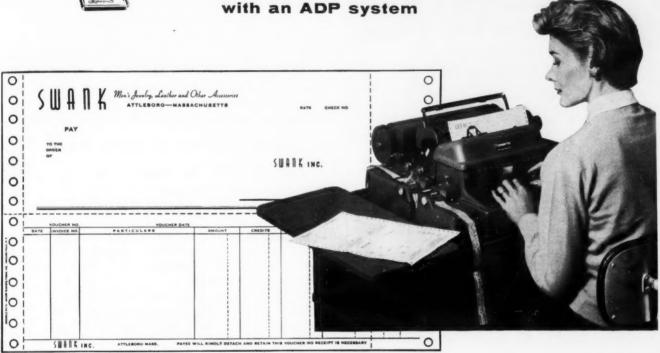
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Voucher checks are prepared in advance on a Flexowriter, typing on a 3-part Moore Speediflo form. The information comes from master tapes and vendors' invoices. The Speediflo is a pasted form and remains together as a unit until payment date, and is processed through a checkwriter. A punched tape, which is a by-product of the voucher-typing,

has additional functions. Every morning by 10:00 o'clock, these tapes are processed through a tapeto-card punch and an IBM Electric Accounting Machine to prepare a voucher register. Later they are used for a monthly accounts analysis.

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(Circle number 317 for more information)



(Circle number 318 for more information)



How to save time with new drafting technique

Simplified method produces clarity and frees draftsmen from time-consuming details, thus providing time for more important work.

A new, simplified drafting plan that is being applied by industrial management executives from coast to coast is resulting in a slashing of drafting time by some 30% to 55%.

It produces clarity without resort to much of the detail work which has conventionally gone into drafting practices. One authority claims that the new technique, widely adopted, could free at least one-third of the nation's 600,000 draftsmen from unnecessary work in producing drawings, and that it would enable them to accelerate projects that are now bottle-necked in design departments.

The National Metal Trades Association has been conducting a series of seminars and clinics to explain the new method. Specialists from such firms as American Machine & Foundry Co. and the General Electric Co. are conducting the clinics, which are being held in key cities throughout the country.

Key to the new system lies in the adoption of the following basic rules:

1. Use of description to eliminate delineation. This should be done wherever three dimensions or fewer are used to describe a part.

2. Use of descriptive terms to eliminate projected views. By using the term "diameter" on a side view, the draftsman can eliminate the necessity for an end view.

3. Omission of repetitive or elaborate pictorial detail. Dotted lines for hidden surfaces may be eliminated in several views without loss of clarity.

4. Use of key legends to indicate nuts, bolts and other standard hardware, showing the outline only where it is necessary to indicate the position of any particular piece of hardware.

5. Use of dotted lines only for clarification. For instance, where holes are to be drawn, one view may suffice if the size and depth are given in a note.

6. Use of symbols to indicate hole sizes. This will do away with drudgery, and with inaccuracies where the holes are small.

7. Elimination of crosshatching except where it will aid clarification by emphasizing parts that might otherwise be hard to see.

8. Use of center line, with only half of symmetrical parts drawn. This eliminates superfluous work.

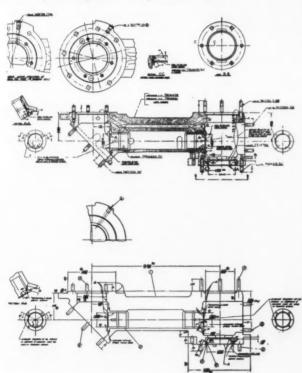
9. Avoidance of hand-lettering. When lettering is typed on appliques and pasted on the drawing, tedium and misspelling are greatly reduced, and uniformity is attained.

10. Omission of arrowheads. By eliminating arrowheads completely, or by using a dot to show the end of a dimension line, the same information is more easily conveyed.

11. Use of datum lines. This eliminates the need for dimension lines, makes the drawing cleaner and less confusing to those in the shop.

12. Use of freehand sketching as a substitute for machine or straightedge wherever possible. For this purpose, tracing paper or a board cover may be used.

All of the rules, of course, cannot be applied equally to all industries. However, in general, properly applied to individual conditions, the new technique is seen as a potent instrument in increasing efficiency, reducing manpower needs, raising the level of contentment of engineering personnel and effecting considerable monetary savings for many firms. m/m



Simplified drafting at work: these two renditions are of the same piece of equipment, drawn (above) in the conventional manner and (below) with the new technique.

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Datatron applications shown

A series of booklets, showing applications of Datatron 208, has been published by Electro-Data, a division of the Burroughs Corp.

Discussing such operations as payroll, utility billing, invoice billing, parts inventory control, etc., the booklets set up problems to be solved and then outline the methods, procedures and equipment recommended for such solution.

Each brochure is clearly illustrated in both photographic and diagrammatic form for complete clarity.

For free copies, circle number 407 on the Reader Service Card.

New variable delay line

A new continuously variable delay line, the model 505, has been made available by ESC Corp. It is designed to be used as a component or as test equipment in advanced computer and radar systems.

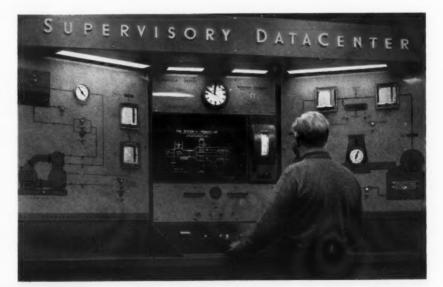
It can be used as a component in equipment with a fixed delay by employing a locking device, available from the same manufacturer. The entire delay range of the model 505 is covered by a single control shaft, in 10 turns.

For further information, circle number 408 on the Reader Service Card.

Designed to work with Stromberg-Carlson's LARC (Livermore Automatic Research Computer) is the same manufacturer's new Charactron, an "electronic stenographer."

The new readout will display and record on film the split-second "thoughts" of the LARC at a rate of some 15,000 characters per second, about 50% faster than computer readouts previously built by the company.

With the LARC operating on



Push-button control over the entire heating and cooling system of the sky-scraper of the future is at the fingertips of the building engineer, using this "dream panel." Created by Minneapolis-Honeywell, the center includes a slide projection screen that will enable him to see the fan system layout and floor plan of any temperature zone in the building.

a 24-hour basis, the new "steno" will turn out what has been calculated to be the equivalent of the output of 9,000 stenographers, working in three eight-hour shifts of 3,000 each.

The only moving parts will be dual cameras for recording data on 35 mm. film. These will be so arranged that one can be loaded while the other continues to operate, thus providing uninterrupted service.

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One-man TV studio

A one-man television broadcasting studio, occupying a space of only 10x12 ft., and costing less than \$15,000 to equip, is now available to business firms.

It is a product of the Hallamore Electronics Co., a division of the Siegler Corp., Anaheim, Calif. The studio can broadcast live shows, films or remote programs.

All video and audio equipment is included in a single master control. In addition, the studio is equipped with film and slide projection equipment, audio and record turntable facilities, all necessary circuits for transmitting and a camera which can be operated by remote control from the master panel.

The manufacturer states that the entire unit can be installed by a single workman in a half a day, without any special tools or equipment.

Through a series of switches and knobs on the master panel, the single studio operator can control cameras remotely, switch from live to film to slide to remote, and, for the purpose of reading news or commercial messages, focus the camera on himself.

The new studio has been made possible through development of a new camera, about one-tenth the size of the conventional TV studio camera.

Through the use of this oneman TV studio, industrial organizations can improve effective communications with employees at relatively low cost.

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HIRING

"The annual growth in the size of our company has meant an annual increase in the number of technical personnel employed. The company's needs are determined by the chief engineer. I have no idea what type of people we need."—Company president

TRAINING

"Too many job in-plant training programs for engineer and research personnel are haphazard and are not pre-planned. In many cases, particularly in the larger companies, younger engineers are assigned to an activity as part of a training program and then forgotten. As a result they become bored and lose interest in the company."—Engineering consultant

WORKING CONDITIONS

"These conditions for our engineers are admittedly not the best. But we have much too much to do just to get the product out. Worrying about whether or not the engineers are happy is one of the last things we've got to worry about . . ."—Plant executive

SUPPORTING PERSONNEL

"Although progress has been made in some of the larger companies in assigning engineering aides and technicians to relieve engineers of routine duties, engineers complain that there is still substantial room for improvement."—Personnel director

COMPENSATION

"Salaries above \$12,000 a year are very difficult to obtain; this situation thus severely limits engineers with advanced training. . . . This . . . ceiling does cause a certain wastage of engineers since many find it necessary to go into administration or other more commercial endeavors to satisfy financial needs."—Management consultant

PATENTS

"In my opinion, the deplorable patent situation in this country has done more to stifle interest in engineering as a career than any other single factor."—Prominent scientist

Engineers!

(Continued from page 44)

jectives and attitudes down to the level of the working engineer, and to serve as a channel of information back to management.

Too many firms, however, don't train their supervisors to carry out the communications job, particularly the second half of the job.

Common weakness: There's one aircraft plant where it was found to be common practice for supervisors to stifle ideas from the ranks. This is usually done by the pocket veto or sometimes even by outright ridicule. Mention this example to a handful of low level engineers and see how many of them can tell you of their own personal experience along this line.

On the positive side, there is an oil company that always invites its engineers to sit in at management meetings whenever specific engineering projects are scheduled to be taken up. This arrangement provides both for keeping the engineers informed about what management is planning (and why), and at the same time keeps the executive level sensitive to what the engineers think and feel.

There are scores of improvements that most companies can make to get more productivity out of their engineers. This fact is made clear in the report recently issued by researchers at Harvard who made an extensive study of the utilization of engineering resources. In fact, the report digs into 12 broad areas pertaining to engineer productivity: organization, planning, hiring, stockpiling, training, placement, leadership, working conditions and equipment, supporting personnel, personnel administration, compensation, and patents. Time and again the researchers found evidence that management's failure to tackle the problems arising out of the engineer shortage are serving to make the shortage more acute.

As the report itself says: "... the chances are good that you can probably save yourself some engineering dollars, and at the same time make a concrete contribution toward alleviating the shortage of technical personnel faced by the nation." m/m



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Located five miles outside Hartford, the 700,000 square foot structure contains just about every employee appeal, facility and luxury imaginable.

For example, during her off hours in the building an office clerk can: have her hair done; have her clothes cleaned (and her car greased at the nearby company service station); order her groceries and buy a gift for her nephew; play bridge, ping pong, or bowl; sun herself beside a pond in a patio designed by famed Isamu Noguchi; obtain complete medical and dental treatment (her

family included free); relax with a bestseller and hi-fi album in the company library; and meditate in a specially designed, soundproof meditation room.

At her functionally designed work place this same clerk is surrounded by eye-appealing greenery that serves as office dividers and is tended by a special crew of leaf polishers. When she looks through the glass wall of her office, she is likely to see swans gliding peacefully through a man-made lake in the corner of Connecticut General's rolling, manicured 275 acres.

Higher productivity

Of the multimillion dollar budget the company has invested in its building, a big portion has been spent on employee advantages—and officials feel the investment is well worth it.

Says Personnel Director Henry Dawes: "This building and the employee advantages it offers will save us hundreds of thousands of dollars a year through improved productivity."

Personnel Man Dawes admits his company has experienced high turnover among women in the past: "A growing business hiring increasing numbers of scarce clerical people is bound to have a high turnover rate, because turnover occurs primarily during the first year of employment."

The impressive new building and the pleasant working environment it provides—is designed to help overcome this problem. The building is attracting ample quantities of job applicants and the company is thus in a position to select the best ones.

"In the clerical field," says Dawes, "the better employees produce twice the volume of lower level people."

Further, he points out, if the new building brings about a reduction of even three or four percentage points in the turnover rate, the savings in indoctrination and training costs will be tremendous.

The fact that the building is away from the center of town has proved to be an employment advantage in disguise. "A person gives lots of thought to the matter before accepting a job out here," says Dawes. "Once she's on the payroll, therefore, she's likely to stay with us permanently."

The company runs special buses



Four court yards, each separately designed by Isamu Noguchi, are part of Connecticut General's building plan. The courts provide an appealing view from the surrounding offices.



Connecticut General constructed a special wing to its new building to house the cafeteria and food preparation facilities (all foods, including fancy pastries, are prepared in the company's kitchens). The cafeteria seats 800. A dramatic effect was achieved by having the cafeteria wing cantilever over a huge reflecting pool.

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In addition to providing special employee facilities, Connecticut General gave special attention to landscaping its 275 acres.



to and from Hartford in the morning and afternoon.

Connecticut General had one other reason for devoting so much of its space to employee facilities. About 2,400 people now work in the building and work spaces have been designed to easily accommodate 1,000 more. But if the time should come when growth exceeds that level, some of the spacious employee facilities areas could be converted to work areas.

Few firms are in a position to finance employee appeals in their

buildings to the extent Connecticut General has done. But whatever appeals you provide or plan for your employees in your present building or a new one, you can take a lesson from Connecticut General's approach.

Instead of providing only specialized recreational programs, for example, as many firms do, Connecticut General has varied

and balanced its attractions in order to appeal to men and women of diverse types and interests.

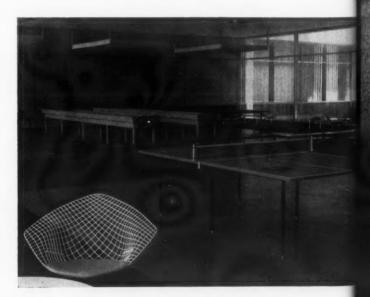
"This way," says Personnel Director Henry Dawes, "we are able to build our staff by drawing the best people from all groups."

Architect for Connecticut General's new headquarters: Skidmore, Owings, and Merrill. The builder: Turner Construction Co. Interior design: Knoll Associates, Inc., and Skidmore, Owings and Merrill.

 See chart page 94 which shows that the kind of employees who participate in the company recreation program are usually not the highest producers.



CG's library features hi-fi equipment and books supplied by a book rental firm.



This spacious game room is only one of the facilities provided for lunch hour use by CG employees.

your company is judged

ODS

by the office you keep!

Cole Steel offices have a personality that radiates friendliness plus efficiency.... Scientifically engineered construction, handsome styling... consideration for comfort... are all combined in Cole Steel Office Equipment. Cole Steel furniture is America's top selling brand... its low initial cost, minimum upkeep, and enduring beauty make it the greatest dollar value in steel office furniture.

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Canada: 329 Dufferin St., Toronto, Ont.

"If you weren't my son-in-law, I'd give you a raise!"



The boss was pleased when his daughter married George. Average fellow, but he'd make a good husband. And the business could use him *somewhere*.

Today, the boss has to admit George has quite a head on his shoulders. He'll get his raise, all right. Maybe even a bonus. Because he's earned it!

You see, George got worried about the high cost of doing business. So he made a few inquiries—and discovered Keysort punched-card controls. Thanks to Keysort's fast, accurate reports, George's father-in-law can now keep on top of every company operation . . . can exercise strict management control . . . can prevent money-losing situations right in the office.

Keysort punched cards — today speeded by the new Keysort Data Punch which simultaneously imprints and code-punches production or sales information—not only help top management plan in advance, they help you as well.

With a minimum clerical burden, you achieve greater reporting accuracy — flexibly, easily — because your office people summarize *direct* to reports. There's no transcribing; no costly, time-consuming intermediate steps. Result: management gets the accurate information it wants on time. And at remarkably low cost.

The nearby McBee man has a presentation which will show you how it's done. Phone him, or write us.

McBee Karana

Punched-card controls for any business

ROYAL McBEE Corporation, Port Chester, N.Y.

Offices in principal cities. In Canada: The McBee Company, Ltd., 179 Bartley Drive, Toronto 16.

(Circle number 328 for more information)

Invention

(Continued from page 38)

6. What are the advertising and promotional requirements?

7. What is the market participation of each competitive manufacturer?

Pricing and Discounts

1. Is the invention priced competitively?

2. Are operating and maintenance costs competitive?

3. Has the discount structure been soundly determined?

4. What are industry practices regarding credit, delivery, and returns?

Prototype or pilot-plant production

When the planning and development phase is completed, it is almost always desirable to test the product and its market acceptability through prototype or pilot-plant production.

A compressor manufacturer developed a new line of hermetic units. Two hundred prototypes in each of two horsepower-sizes were produced and distributed to representative potential customers. The company benefited from the preliminary production by developing manufacturing techniques were not at first apparent. Minor flaws in the compressor design not uncovered by laboratory testing became obvious after a few months of actual use. Original sales forecasts and discount schedules were revised in the light of user reaction.

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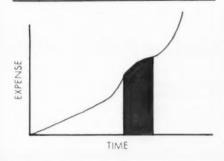
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Most companies use pilot-production runs prior to the full-scale production and distribution of a new product. It seems, however, that manufacturers occasionally do not derive all the benefits available from field-test programs. Specifically, the test installations should

thanks to XEROGRAPHY...



"ROCKWELL speeds paperwork, cuts duplicating costs 35%"

"Xerography gives us dependable, onthe-spot, one-hour duplicating service—something we haven't been able to get any other way," says F. P. Maxwell, vice-president of the power tool division of Rockwell Manufacturing Company, Pittsburgh, manufacturer of the world famous Delta and Walker Turner power tools.

"Such service, as any business executive knows, is vital to many phases of an effective program."

Rockwell carries out production at 23 plants, divisions, and subsidiaries in 12 states, Canada, and foreign markets. Understandably, the administration and communications necessary for such an industrial network are complex, but they have been greatly simplified by the use of XeroX® copying equipment.

"Xerography," says Maxwell, "has speeded our paperwork, and cut our duplicating costs by at least 35%. More important, it has made possible the effective use of modern manage-

Xerography copies anything writ-

ten, printed, typed, or drawn.

Same, enlarged or reduced size.

Copies onto all kinds

of masters-paper,

metal, spirit, trans-

lucent-for duplicat-

ing. Copies line and

halftone subjects.

ment methods that—without a system like xerography—would be impractical, if not impossible."

Xerography—the clean, fast, dry, electrostatic copying process—enables Rockwell to distribute copies of monthly accounting statements to all key personnel within a few hours after the statements are completed. Prepared on 11" x 17" work sheets, the statements are reduced with fine legibility by xerography to $8\frac{1}{2}$ " x 11" size on offset paper masters for runoff of multiple copies.

Other Rockwell applications of xerography are price sheets and sales literature hurriedly needed, internal telephone directories, up-to-the-minute lists of sales personnel for various divisions, and, in short, wherever else speed and self-sufficiency are vital to Rockwell's communications program.

WRITE for proof-of-performance folders showing how xerography is saving time and thousands of dollars for companies of all kinds and sizes.

THE HALOID COMPANY 57-59X Haloid Street, Rochester 3, N. Y.

Branch offices in principal U.S. cities and Toronto

HALOID XEROX

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(Circle number 329 for more information)



there's a new design in office efficiency

CLARIN "Commutter"

AUXILIARY OFFICE CHAIR with tablet writing arm

Here's the chair that can solve the problem of what they write on and where they sit...all in one compact, comfortable, beautiful unit. These chairs may be grouped in an office for informal discussions or placed in a conference room for a sales meeting or training session. The tablet arm swings up and locks into position at a scientifically determined height for effortless writing or may be swung down alongside the chair when not required. The *Commuter* is also available without the tablet arm for instantly available seating requirements. Both chairs are guaranteed for 10 years!

- 2" foam rubber seat-Naugahyde, nylon or grospoint upholstery.
- Wide choice of frame and upholstery color combinations to match modern office decor.

See your office equipment dealer or send now for complete information.

CLARIN MANUFACTURING COMPANY
Dept. 47, 4640 West Harrison St., Chicago 44

Please send me full information on the new Clarin Commuter auxiliary office chairs.

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COMPANY_

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CITY____

STATE

CLARIN MANUFACTURING COMPANY

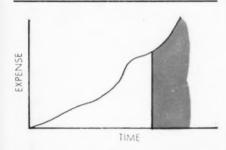
4640 West Harrison St., Chicago 44

be frequently examined, and all comments offered by the users carefully considered.

At the end of this phase, the final production design should be complete. The most practical means of manufacturing should be determined, and original estimates of sales potential, price and marketing requirements should be revised.

Commercial production

Commercial production and distribution should be undertaken only after the previous four phases have been properly executed. The



curve shows that this is the area in which the largest amounts of time and money are required. Management can be assured that these expenditures are properly directed only when the answers to all of the important technical and business questions have been provided by the information and experience earlier gained from preliminary development, evaluation, planning and development and prototype production.

Licensing

end

muter

If an unused invention is looked upon as an empty building, perhaps the number of sound, but inventions unused, can reduced. If a warehouse were no longer useful to a manufacturer, management would undoubtedly consider its modification for production use or for office space. If such alterations were impractical or undesirable, management would undoubtedly attempt to sell or lease the property. In short, a vigorous effort would be made to recover as much as possible of the company's investment in the building.

Too often an invention is rejected for further development and subsequent commercialization simply because it does not satisfy the immediate product needs of



PITNEY-BOWES MAILOPENER PITNEY-BOWES, INC.

4566 Walnut Street, Stamford, Conn.

... originator of the postage meter ... offices in 103 cities in U.S. and Canada

When you have a Pitney-Bowes MailOpener, everyone in the office gets going on the day's work many minutes earlier. The time saved each day means lots of dollars each year.

A girl slitting envelopes open with a knife can't begin to equal the speed of a MailOpener. It swiftly, safely snips a hairline edge off the envelopes - of any size, thickness or stock-as fast as they can be fed. Three models, hand or electric.

• Free Trial: The nearest Pitney-Bowes office will demonstrate a MailOpener in your own office on your own incoming mail. No obligation. Make that phone call today. Or write for free illustrated booklet.

FREE: Send for handy desk or wall chart of Postal Rates, with parcel post map and zone finder.

(Circle number 332 for more information)



(Circle number 331 for more information)



standing quality, expert designs

Many companies are paying through-thenose because they're not sure their particular form problems can be solved by standardization. Other companies worry about delivery. You can relieve any anxiety by inviting a Baltimore Business Forms expert to investigate. And, if possible, he'll develop cost-cutting standard forms that can be used throughout your operation.

Investigate your forms for wasteful frills

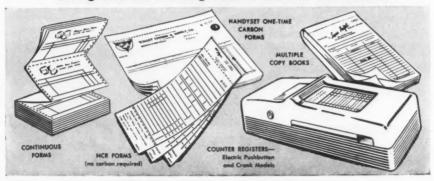
Here's your chance to cut out costly frills and still maintain your company's business form personality. By standardizing paper sizes, inks, numbers, carbon and colors . . . with other leading businesses (who have similar business form problems), you assure your company an initial money saving up to 32 %. Predetermined printing dates guarantee prompt delivery. Your Baltimore Business Forms representative will tell you exactly when the next production run will be.

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The Baltimore Business Forms Company

(THE BALTIMORE SALESBOOK COMPANY) Saving time and reducing costs in business and industry

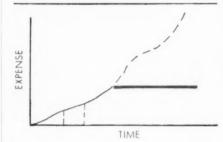


(Circle number 333 for more information)

the company. **Dust-collecting** inventions represent lost investment; inventions that are made available through licensing represent royalty income for the invention-owning company and new business opportunities for the licensee.

Licensing situations will not be overlooked if each invention is evaluated according to the technique described under "Evaluation." That is, the invention should first be appraised objectively and then related to the needs, capabilities, and objectives of the company, so that management can determine whether it should be commercialized internally exploited through licensing. Good inventions are wasted through rejection only when the two steps are not considered separately.

Licensing an invention is essentially the same as merchandising a finished product. The licenser should have an accurate estimate of the invention's value, should price it realistically and present it as attractively as possible.



The accurate estimate of the invention's value is only partially provided by the two-step evaluation. More detailed analyses relating to the commercial and business aspects of the invention should be made. Briefly, the licensor should estimate, on the basis of factual information, the benefits to a licensee in terms of sales and profits as well as the expenditures required to effect commercialization by him.

When the importance of the invention has been established, a reasonable royalty rate or purchase price should be determined. The level of compensation depends on many factors, only a few of which are: profiit margins available to the licensee, estimated sales volume, capital investment required, uniqueness of the invention and the patent situation as it relates to protection and validity.

The presentation of the inven-

Typing magic comes to descriptive accounting! And with it, a new high in accounting automation and flexibility, too! All built into the

new Burroughs typing Sensimatic

Through this advanced new accounting machine's boxwriter typing principle, you get cleancut printing and completely jam-free operation even at the top typing speed of nine characters a second. Boxwriter magazine holds 84 characters, with many options available.

New automation, new flexibility are yours, too, through the exclusive Sensing Panel that guides the machine automatically through every accounting job. Each interchangeable Sensing Panel wraps up four jobs, switches from job to job at the flick of a knob.

Is there room for this new degree of mechanization, this flexibility, speed and typing talent in your descriptive accounting setup?

Call our nearby branch for a demonstration of the Burroughs Typing Sensimatic Accounting Machine—the Sensimatic family's newest member. Burroughs Division, Burroughs Corporation, Detroit 32, Michigan.





"Burroughs" and "Sensimatic"—Reg. TM's.

(Circle number 336 for more information)

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HARTER SIDE CHAIRS
SAVE SPACE AND MONEY!



These smart new chairs are compact, comfortable and easy to keep clean. Both armchair and side chair models with either wall-saver legs to protect office and reception room walls or with space-saver legs to save every inch of floor space. Foam rubber back cushion and choice of rubberized hair or molded foam rubber-Nukraft seat give lasting comfort. Fine Harter steel construction, durable baked-on finishes and quality upholsteries assure long-lived good looks. Easy on the budget prices. For a free trial in your own office—without obligation—write for the name and address of your nearest Harter dealer.

Harter Corporation, 1006 Prairie Street, Sturgis, Michigan In Canada: Harter Metal Furniture, Ltd., Guelph, Ontario

In Canada: Harter Metal Furniture, Ltd., Guelph, Ontario In Mexico: Muebles Briones, S. A., Mexico City, D. F.



HARTER STEEL CHAIRS

(Circle number 337 for more information)

tion should be carefully planned. Technical development should continue until the invention clearly and convincingly demonstrates its significant features. Whenever possible, prototypes or scale models should be constructed, to stimulate interest as well as to provide information at the time of the presentation. All of the supporting cost and market studies should be made available to the prospect, and should be clearly and attractively prepared. The completeness of the information offered by the licensor may largely determine whether a license will be accepted by the prospect.



ABOUT THE AUTHOR

Walter J. Cairns is a staff member of the Advanced Research Division of Arthur D. Little, Inc., consulting research company of Cambridge, Mass., where his major responsibility is evaluating and commercializing inventions.

After a thorough review of the technical and business aspects, the licensor should list the requirements for the successful commercialization of the invention. Such things as optimum company size, production, distribution and product line should be considered. On the basis of these criteria, prospective licensees should be selected. The most desirable prospect is not always the leading company in the industry. The third- or fourthranking producer often requires new products from outside sources in order to increase and maintain its competitive position. Established companies looking toward new industries for diversification may also be excellent prospects.

Finally, negotiations should result in an agreement that is soundly based on a mutual understanding of not only the invention but also the interests and objectives of each party. A licensing agreement must be fair to be successful. A legal document alone is not usually sufficient to assure the licensor of continuing benefits from his inven-

tion. m/m

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Which of these 12 case histories on "improved communications" will aid you?

Your firm stands to profit from these case histories, which reveal how top companies pocket sizable savings with P-A-X business telephones.

You'll see exactly how these companies keep switch-boards free for outside calls . . . handle "inside" calls in a split second . . . provide immediate, private person-to-person contact between all departments . . . cut the high cost of rented telephone equipment . . . save time and money in other ways.

You can quickly learn more about the proven P-A-X way to improve communications and trim costs. Simply check the case histories you want, then tear out and mail this page. Do it now.

Draw upon this rich source of ideas—check as many as you like!

- 1774 How a \$180,000,000 financial institution, Talman Federal, improves customer service. P-A-X telephones unite all departments for fast, convenient customer service.
- 1764 Revere Copper & Brass keeps company-wide control of operations, reports new efficiency, greater time-savings with plant-owned P-A-X telephone system.
- 1770 How Glens Falls Insurance Company saves countless steps, cuts paperwork, speeds operations with P-A-X inside telephone system.
- 1766 How Crown Cork & Seal Company speeds communications and saves money with its privately owned P-A-X business telephone system.
- 1771 How Pheoll Manufacturing Company co-ordinates and speeds its operations with P-A-X inside telephone system.
- 1773 For over 38 years, Bunte-Chase Candy Company executives have enjoyed fingertip control of operations and production with the help of P-A-X telephones.
- 1769 How plant-owned P-A-X telephones sharpen efficiency, conserve manpower for Detroit Hardware Manufacturing Company.
- 1768 How Alexander Film Company co-ordinates scores of operations, many departments, with its P-A-X business telephone system.
- 1763 How the L & N Railroad links system-wide operations directly through its own unified P-A-X telephone network. Company officials report striking savings in time and money.
- 1762 How Jacob Ruppert Brewery maintains close control over every brewery operation with its own P-A-X business telephone system.
- 1761 In the business of running Mumford High School, P-A-X inside telephones provide immediate private contact between persons in all departments.
 - 1772 At. St. Francis Hospital, inside calls continue without interruption, even if emergencies swamp the city telephone lines.



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Please send me the case histories I have checked.

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papers jumbled in bulging, dog-eared folders, records lost or misfiled - if you're losing minutes and dollars. wearing down your nerves every time you want to file or find a letter, order, invoice, Here's Peace! ACCO-filing will stop this war of nerveskeep all your papers neatly, correctly filed, safely bound, where you want them when you want them.

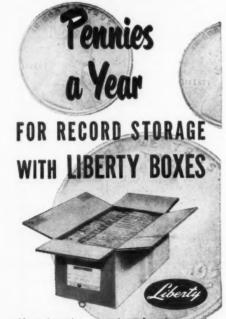
ACCOPRESS Binders and ACCOBIND Folders solve your file problems-are available in most any size, any capacity, with or without tabs—and at transfer time you just slip the contents, still bound, from Accobind Folders, saving the covers for year after year of more filing.

Ask your stationer about Acco-binding.

ACCO PRODUCTS

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(Circle number 339 for more information)



Keep inactive records safe, clean and neat with Liberty Storage Boxes. You'll find them sturdily built ... and so economical. The cost of a Liberty Box over a ten-year period figures out at just pennies a year! Write today for free catalog—find out how Liberty Boxes can help you lower record storage costs. Sold by stationers and office equipment dealers from coast to coast.

BANKERS BOX CO. Dept. MM-10 venue · Franklin Park, Illinois

(Circle number 340 for more information)

thought starters

Thought Starters deal with "practical solutions to administrative problems." The editor invites contributions—which are paid for at our normal space rates.

EQUIPMENT

Tractor hauls loads without operator

Controlled by radio waves, a newly introduced Guide-O-Matic tractor stops and starts automatically at predetermined points, without an operator.

A guide wire, buried beneath



the route to be taken, transmits the necessary signals to an electronic brain mounted on the prime mover. In the accompanying illustration, the Guide-O-Matic is hauling two trailers, containing some 4,000 lbs. of paper, up a 8.5%

Designed for safe operation, the Guide-O-Matic will automatically come to a stop if any outside force influences it to leave its regular path.

For more information, circle number 400 on the Reader Service Card.

Portable recorder is self-powered

A lightweight, self-powered miniature recorder-transcriber been introduced by Miles Reproducer Co. of New York.

The Walkie-Recordall will operate from within a closed briefcase, according to the manufacturer, and is equipped with a voiceactuating device which automatically starts and stops as the dictator's voice starts and ceases. An optional accessory makes it possible to exclude all sounds except a voice spoken or whispered close to the microphone, when it is desirable to screen out traffic noises.

For further information, circle number 401 on the Reader Service Card.

TRAINING

Filmstrips take up employee problems

Typical problems in employee relations are set forth in "Supervisory Problems in the Office," a series of sound and color filmstrips.

Issued by the National Office Management Association, series is made up of six filmstrips, each of which runs for about eight minutes. Three synchronized records and a conference leader's manual are also included in each

Problem situations frequently encountered by office supervisors are presented in the series in a manner aimed at stimulating group discussions leading to their solu-

For further information, circle number 402 on the Reader Service Card.

PUBLIC RELATIONS

Caterpillar promotes with auto decals

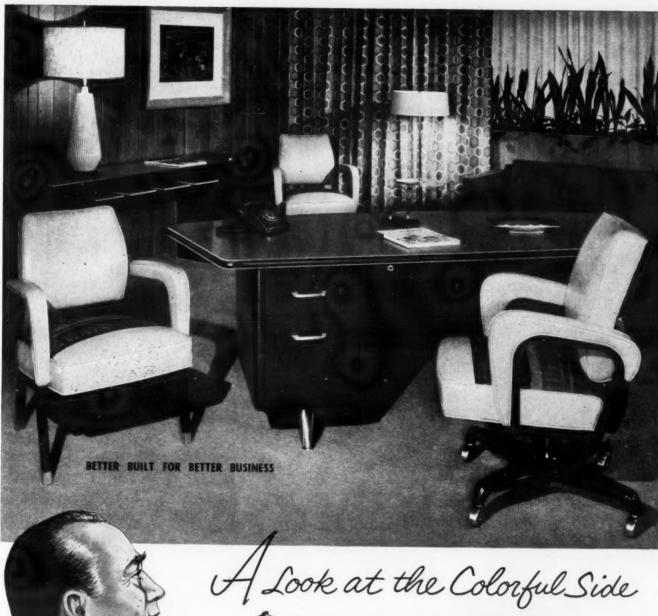
Vacation-bound employees of the Caterpillar Co. this past summer were provided with auto windshield decals that gave the com-



pany an estimated 45 million miles of highway publicity.

The identification labels were of the pressure sensitive type, made by the Meyercord Co., and were so designed as to be easily ap-

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A EXECUTIVE FURNITURE

IN STRIKING, NEW COLOR AND FABRIC COMBINATIONS

Dramatically beautiful! Contemporary design is evident in the arched leg desk and new executive chairs. ASE, with its accent on color, blends subtle overtones with dramatic contrasts to create an effect of modern elegance in your office. Color harmonies are assured with ASE Color Selector Kit.

See your ASE dealer for office planning and service.

THERE'S AN ASE DEALER NEAR YOU

DESKS . CHAIRS

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FILING CABINETS

STORAGE CABINETS



ALL-STEEL EQUIPMENT INC. AURORA, ILLINOIS

(Circle number 341 for more information)

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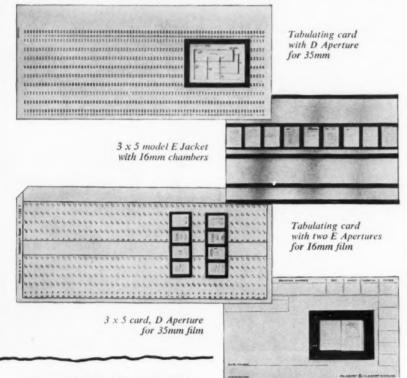
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ODS

QUESTION?

Which of these Filmsort Cards is used for Personnel Records?*



* SEE ANSWER BELOW

FILMSORT is the original, most complete and most versatile group of systems for filing, sorting, reproduction and enlargement copying of microfilmed records of all types.

The Filmsort Aperture and Jacket cards shown here represent several different Filmsort systems for converting microfilm into an active record medium. Here are Aperture cards for engineering drawing control in large or small companies; a card for filing one to four documents on 16mm microfilm; a 16mm Jacket card for multiple document files.

*The 3x5 16mm Model E Filmsort Jacket is ideal for most personnel records. Up to 30 documents filmed at a 22x reduction can easily be filed in a single card indexed alphabetically or numerically for incorporation in an active card file. The material is greatly condensed, yet readily available for reference in a card reader without removal from the Jacket. Enlargement prints can be made direct from the film if required—and it is simple and practical to add to the file at any time subsequent to the initial filming and microfilling process.

One—or more—of the Filmsort systems for unitized microfilm will answer your records problems. For complete information on Filmsort Unitized Microfilm Equipment and Supplies, see your local Filmsort distributor.

FILMSORT

DIVISION OF

DEXTER FOLDER COMPANY

A Division of Miehle Printing Press and Mfg. Co.

Pearl River, New York

(Circle number 342 for more information)

plied to bumpers when state laws prohibit windshield use.

Additional millions of continuing miles of publicity are expected to accrue to the company following the vacation period, since each of the 45,000 signs Caterpillar distributed is likely to remain on an employee's car for many months to come.

For further information, circle number 403 on the Reader Service Card.

BUSINESS SHOW

Problem clinic marks exhibition

A Management Center, staffed to answer problems of office management, will be a feature of the 1957 National Business Show. The show will take place at New York City's Coliseum from Oct. 28 through Nov. 1.

The Management Center will present a series of panels at which eight experts will answer questions about data processing, methods and procedures, communications, records administration, duplicating and the like. Businessmen located in New York will enjoy the special privilege of calling JUdson 2-6010 for direct connection with the center. Their questions will be discussed and answered directly by telephone.

With an anticipated attendance at the show of some 100,000 people, it is expected that the flood of questions will exceed the Management Center's physical ability to handle them. Many problems, therefore, will be directed to outside authorities and answered later by mail.

NEW LITERATURE

How to write a good letter

"Writing What Comes Naturally," is the title of a booklet prepared by Ellis Gladwin for the Connecticut Mutual Life Insurance Co.

Illustrated with amusing cartoons, and printed in color, the booklet sets forth a series of recommendations for the writing of business letters. It is replete with examples from actual letters, showing both good and bad ex-

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For a free copy, circle number 404 on the Reader Service Card.

Booklet advances secretarial tips

If your secretary needs help, a 16-page illustrated booklet, "Secrets of Secretarial Success," describes some of the tools and techniques that are currently available to assist the office secretary. Published by Remington Rand, the booklet explains how a properly organized filing system can save time, discusses various types of filing systems and contains a list of rules for progressive filing.

For a free copy, circle number 405 on the Reader Service Card.

New office guide lists 5,000 products

Shaw-Walker Co.'s 1958 Office Guide, just published, is a 252-page encyclopedic catalog that pictures, describes and plainly prices 5,000 office products—fireproof equipment, desks, files, chairs, counters and systems— all "time-engineered" to make today's shorter office hours more productive of accomplishments and profits. Includes hundreds of illustrations in color.

For a free copy, circle number 399 on the Reader Service Card.

SALES MEETING

Session tailored to the air age

A unique sales meeting, tailored to the air age, is planned this fall by H. H. Robertson Co., Pittsburgh building products firm.

The session will consist of four meetings of four groups of salesmen who will be flown to Pittsburgh, conduct all their sessions in the Greater Pittsburgh Airport and be quartered at the Airport Hotel throughout the two-day meetings.

At the conclusion of each session, the salesmen in each group will be flown to the company's recently-acquired subsidiary in Connors-ville, Ind., the Porcelain Steel Corp. At the end of the meetings the salesmen will fly from Connorsville to their home cities.

All told, about 150 salesmen will take part in the four different airport sales meetings.

A. W. Hedgren, vice presidentsales for H. H. Robertson, said the salesmen will have no need to leave the airport during the sessions, since hotel, meeting rooms, restaurants, stores of all kinds and other airport facilities will provide for all their needs.

INSURANCE

Warehouse coverage endorsement provided

By Ira S. Kaye

Here's an item for insurance minded importers who store their stocks of imported merchandise in warehouses at ports of entry in the United States, whether duty paid, or "in bond."

There is no need to maintain separate fire and extended coverage policies if you already have your



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own ocean marine policy insuring your importation from foreign to U. S. warehouses. An ocean marine policy can be set up to include a warehouse coverage endorsement, to cover imported goods stored at the U.S. port of entry, usually at rates lower than a separate policy (or policies) would provide.

Generally, this feature requires that a report of such merchandise stored at port warehouses be rendered to the underwriters monthly. This endorsement provides the advantage of up-to-date, sufficient and accurate coverage at a favorable rate, without the higher outlay specific coverage policies would entail, without excessive coverage, without awkward and expensive upward or downward coverage adjustments, without the disastrous possibilities of under-insuring.

PACKAGING

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ODS

Device prints, colors during packaging step

Printing of multicolor designs on cellophane, plastic film or paper packages during the packaging operation is accomplished by the new "Imagraph," according to Adolph Gottscho, Inc., manufacturer of the device.

The Imagraph comes as a separate unit that can be attached to any standard wrapping, bundling or bagmaking machine, and requires neither ink nor printing

The new device enables the packager either to use unprinted stock and apply his own designs to the wrappers as part of the packaging operation, or to use partially pre-printed stock to which variable imprint may be added.

The process provides for up to four colors to be printed simultaneously on either side of the packaging material.

For further information, circle number 398 on the Reader Service Card.

Carton marker works without operator

The Mark V Volu-Mark is a new marking unit that permits automatic assembly line marking of various size packages without operators or line stops for size adjustment.

Manufactured by the Ideal Stencil Co., the new marker adjusts itself for carton heights up to 21 inches and for lengths from 8 to 36 inches. It counts the number of units marked, positions each carton for marking and prevents overshipments by shutting itself off.

The device is said to imprint stencil, machine or handcut trademark designs in various sizes, and it is equipped with a safety bar and switch which insure immediate stoppage or quick reverse.

For further information, circle number 397 on the Reader Service Card.

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How to release that extra productive power in your people

EDITOR'S NOTE: Leslie M. Slote, MM's editorial consultant, recently completed a fact-gathering study of the forces that motivate employees to higher productivity. The study was undertaken at the request of President Perry R. Roehm of the Norden-Ketay Corp. where Mr. Slote serves as Director of Personnel and Manager Development. Out of the study came a comprehensive 21-page report of findings which, according to N-K executives, has helped stimulate greater productivity at all levels within the organization. This article is an edited and condensed version of Mr. Slote's report to his firm's management. For a free copy of the full report for use within your own organization, circle number 411 on the Reader Service Card.

Which of these improvements could you use in your company right now?

- Higher worker productivity
- More employee attention to quality
- Greater attention to cost reduction
- Closer employee identification with the interests of your company
- A stronger sense of personal responsibility among people at all levels
- Increased job satisfaction among your people

You can have all of these profitable benefits. They apply equally Horses never gamble on people, but successful managers do. Recent studies at the University of Michigan and elsewhere show that many of today's commonly accepted methods of motivating people are outmoded. Companies that get the best results from their employees do it by taking off certain kinds of pressure, and putting on others. These facts will help you release that latent power in your people.

well to employees in office and factory, and in all levels of management.

The way you get these improvements is simply to apply the practical findings that have resulted from recent and extensive research in the area of *employee motivation*.

It's mostly a question of understanding and harnessing two forces:

First, the forces that make people tick.

Second, the influence of group dynamics on individual productivity.

The rules are simple to understand and apply, and the benefits can be startling. Scientific data conclusively prove that the application of a consistent pattern of sound motivational principles leads directly to high productivity and high job satisfaction. But in

order to apply these principles, you may have to give up some long held beliefs.

What is motivation?

Psychologists refer to motivation as the process by which an individual is impelled to act or respond in a certain manner. Its significance becomes clear in the contrast between the superior performance of a highly motivated employee and the lower productivity of an individual with similar abilities but deficient motivation. All motivational stimuli are not equally effective with all people, but there are some that are generally effective.

Experience has clearly shown that individuals attain outstanding results when they want to accomplish goals of their own free volition. Conversely, they attain only mediocre results at best if they are

directed or driven by external forces, rather than motivated from within.

One of the outstanding examples of a successful company operating on scientific principles of motivation is the Lincoln Electric Co. of Cleveland. By placing primary emphasis on motivation of the individual, management developed a workforce in which individuals are able to earn an average annual salary exceeding \$8,000. Their productivity per man in terms of dollar sales is four times larger than that of the industry, and they average a 10% reduction in labor costs annually. They attribute their increased employee productivity to the fact that all levels of management subscribe to the following:

Recognize and reward outstanding effort and accomplishment. Advance an individual only on the basis of his ability and outstanding contribution to company objectives.

Develop a strong feeling of team spirit, so that each individual feels a sense of responsibility for the team or work group of which he is a member.

All individuals have latent abilities that should be developed. Therefore, periodically give a person a job over his head, but at which you know he can succeed if he tries.

Because motivation is a continuing process, keep up the pressure and do not let the individual relax with the feeling that he has arrived.

The nature of motivation

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Motivation of necessity places emphasis upon the individual. Psychiatrists today believe that people act and respond on the basis of ego motivation, which has both positive and negative aspects. The Survey Research Center of the University of Michigan, whose pioneering studies have given us most of our practical knowledge on motivation, summarizes the positive driving forces or ego motives that influence the individual as follows.

Self-expression: The individual wants a chance to develop and

demonstrate his own strongest abilities and talents.

New experience: The individual wants his interests and abilities stimulated through varied tasks.

Self-determination: The individual wants freedom to exercise choice in making decisions.

Completion or closure: He wants the freedom to carry a job through to completion.

Ego enhancement: He wants to increase his self-esteem, through pride in accomplishment or the appreciation of one's self by others.

You are undoubtedly familiar with the negative aspects of ego motivation typified in the personality problems of insecurity, frustration, overcompensation, feelings of inferiority, fixated responses and hostility.

The third method

Historical experience with motivation may be divided into three stages. The oldest method of motivation is based upon *fear*, punishment and negative sanctions. An employee subject to this method is ordered to meet production quotas "or else," or is told, "Spoil one more work piece and you're fired." This negative approach usually yields negative results today.

The next stage is widely practiced today, and is based upon the use of rewards and inducements intended to encourage good performance. Here we are concerned with a dubious relationship of rewards to daily produc-Some are long-term rewards, such as pension plans, and do not bear a direct relationship, while other employee benefits are not administered by the person responsible for productivity of the work group. These rewards and benefits are not directly related to motivation for increased productivity because they have been removed in space, time and nature from the day-to-day efforts of the employees on the production line. However, their usefulness cannot be underestimated in other areas such as decreasing turnover or reduced absenteeism.

A major misconception among

MANAGEMENT BY MOTIVATION

a check list for TOP MANAGEMENT

Do you and your management team set the pace by showing interest and enthusiasm in your duties so that you can motivate others to do the same?

YES- NO-

Are you aware that motivation is a continuous, never-ending job because the inter-relationship of people, situations, and conditions is constantly changing?

YES- NO-

Do you have a carefully considered plan for evaluating each job relative to the others—a plan which fairly reflects differentials among jobs in terms of key factors required for their successful performance.

YES- NO-

Do you constantly appraise the performance of those men reporting to you and acknowledge outstanding effort and contributions to company goals?

YES- NO-

Are you harnessing and balancing all departmental functions, so that your team pulls as a self-coordinated unit with the right effort at the right time and at the right place?

YES- NO-

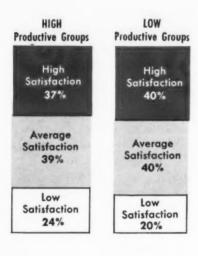
Are those reporting to you constantly aware of the fact that the "forgotten man" exists in the intermediate level of supervision, and that he must be kept informed on all plans and decisions so that he understands goals and is moved to do his best by knowing what is expected?

YES- NO-

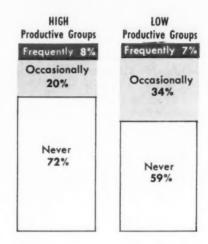
Are those reporting to you selfcoordinating on a horizontal level, so that they exchange information freely, make required inter-departmental decisions, take prompt action, and function as a team?

YES- NO-

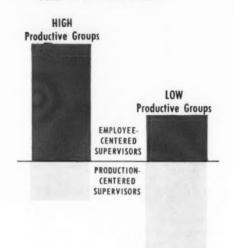
1. ATTITUDE TOWARD COMPANY AND PRODUCTIVITY



2. PARTICIPATION IN COMPANY RECREATIONAL ACTIVITIES AND PRODUCTIVITY



3. EMPLOYEE-CENTERED SUPERVISORS ARE HIGH PRODUCERS



many managers and supervisors today is that methods of employee motivation of necessity fall into either one of these two categories: fear or rewards. But now proven scientific thinking has turned away from the system of grafting on external rewards to obtain increased productivity. We are now entering a third stage of trying to establish a cause and effect relationship of motivation to productivity goals. Although this will still be a scientific frontier for a long time to come, we have enough precise information to be able to apply extremely useful tools.

What research shows

Pertinent results of motivation studies conducted by Dr. Rensis Likert of the Survey Research Center, University of Michigan, are shown in the charts above. Note that certain factors commonly assumed to increase productivity bear a negligible relationship.

For example, Chart 1 shows that high productivity groups do not have more favorable attitudes toward the company than low productive groups. A favorable attitude will help to decrease turnover and absenteeism, but will not by itself necessarily result in high productivity.

Chart 2 shows a similar negligi-

a check list for MIDDLE MANAGEMENT

Do you as an executive set the pace and attitudes for your people?

YES- NO-

Does each member of your department understand the relationship of his individual job to the company operation? YES- NO-

Are your intermediate supervisors familiar with top-management thinking, latest company-wide developments, and the relative importance of various activities to the company's profit plans? YES- NO-

Do any of your decisions or actions cause confusion among your supervisors? YES- NO-

Do you digest problems, solutions, confusion, and then give a clear story to your people? YES- NO-

Do you have a way of knowing how your people react to your decisions, and what they think about you and your management? YES- NO-

Have you developed a healthy and receptive atmosphere for hearing and acting upon employee complaints and suggestions?

Do you have a carefully considered supervisory selection and training program for obtaining and developing the type of management you want and need? YES- NO-

Do you recognize that in addition to training new supervisors, you continuously need to re-train your present departmental management team to insure their use of the best management methods, and to equip them to handle new and changing jobs?

Do you take a chance on your men by letting them learn through mistakes, by showing a calm reaction and constructive approach to occasional failure, by encouraging them to stick their necks out when the occasion warrants? YES- NO-

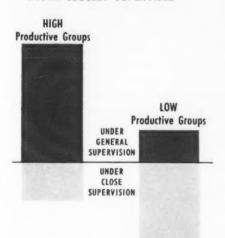
Are you aware that it is your responsibility to understand your subordinates and not their responsibility to understand you? YES- NO-

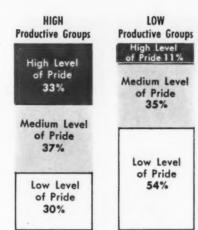
Are you aware of the fact that the greatest period of self-development always takes place when a man feels, understands, accepts, and exercises the full weight of responsibility for his job?

4. LOW-PRODUCTIVE GROUPS ARE MORE CLOSELY SUPERVISED

5. RELATION OF PRIDE IN WORK GROUP AND PRODUCTIVITY

6. GROUP LOYALTY AND PRODUCTIVITY







a check list for INTERMEDIATE SUPERVISORS

Do you have a thorough understanding of company goals, your part in meeting profit objectives and do you have full confidence in their attainment?

Do you avoid confusion with a clear understanding of what is expected and how to do it?

YES—NO—

Do you offer suggestions or constructive criticism to the supervisors who report to you, and ask for additional information when necessary?

YES- NO

Do you build team spirit and group pride by getting everyone into the act of setting goals and pulling together?

YES -NO-

Do you keep yourself free from becoming submerged in production emergencies, and do you have scheduled times for meetings with your subordinates?

YES— NO—

Do you encourage each of the supervisors reporting to you to come up with suggestions about ways to improve things?

YES— NO—

Do you make it easy for your people to approach you with job or personal problems?

Do your subordinates appear to be too busy with production problems to be concerned with their own subordinates' personal difficulties?

YES- NO-

Do you give your subordinates a feeling of accomplishment by telling them how well they are doing in comparison with yesterday or last week, or a month or year ago?

YES— NO—

Do you encourage supervisors reporting to you to build individual worker confidence and praise good performance, or are they afraid of being accused of soft-soaping?

YES —NO—

Do the supervisors reporting to you use personnel records and close observation to learn exactly what skills each worker has, so that his best abilities may be used?

YES— NO—

Do you expect your supervisors to communicate to their people about how jobs are analyzed and evaluated, and what the job and progressions are?

YES -NO-

ble relationship between participation in the company recreational program and increased productivity. Company athletes aren't usually the high producers.

The University of Michigan studies show that most foremen consider the most important phase of the supervisory job to be production rather than human relations. But Chart 3 shows how wrong this idea is; the practice of good human relations is shown to be the most important. This is a clear indication of the job that management faces in helping the line organization to become employee-centered in its supervisory practices. The production-centered supervisor or executive sees his people primarily as vital cogs in a machine or as instruments of production, rather than as individuals. The employee-centered supervisor or executive, however, is genuinely interested in each employee, his problems on and off the job, his future, and his well-

Chart 4 shows that close supervision is associated with lower productivity, and general supervision with higher productivity. General supervision does not mean loose or careless supervision. General supervision as opposed to tight supervision is more effective because it allows the individual

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worker a measure of choice and freedom.

Chart 5 shows the high degree of correlation between productivity and the individual's feeling of pride in his work group. Similarly, Chart 6 shows the close relationship between productivity and group loyalty.

Group loyalty and group pride are created by the attitude of the superior toward the people working under him. The manager or supervisor who, in the eyes of his people, identifies with these people is typical of the high pride groups. The same is true of the superior who considers his employees primarily as human beings, rather than as robots to get the work out.

Check your motivating ability

How well are you doing in the job of motivating people?

Dr. Likert found that work groups with high group pride and loyalty are more productive for these characteristic reasons: 1) members of the group pitch in with enthusiasm and help one another to get the work out; 2) they have a strong feeling of team spirit and individual responsibility for the job; 3) they use their own initiative to balance work loads and solve problems; 4) they have high production goals, paralleling those of the supervisor; 5) they produce more with less sense of strain or pressure; and 6) they have a healthy, favorable attitude toward high producers within the group.

The person in the key position to motivate line workers is the line supervisor. But the supervisor takes his signals from those above him. How well are you measuring up to your responsibilities of motivating people for higher productivity? On page 93 is a check list against which top executives can measure their motivational attitudes and actions. Additional check lists that can be used by the middle management and intermediate level of supervision in your company appear on pages 94 and 95.

Perhaps the one question that should be at the top of all these

Do you ever say or do anything that detracts from the sense of personal dignity that each of your people possesses? m/m

MANAGEMENT METHODS

to be

Value Analysis

of Office Equipment



Art Metal points the way to cost reduction in large and small offices



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The state of the s	CHECK equipment for PERFORMANCE ☐ Is it functionally built and organized to make work output easy and fast? ☐ Is it tailored to individual job needs? ☐ Does it cut out waste motion? ☐ Does it assure all-day working comfort?
	for SPACE-SAVING DESIGN Does it reduce office floor space needs per worker? Does it decrease the need for supplemental equipment?
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permit easy rearrangement and expansion?

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MANAGEMENT METHODS

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Hobby kit maker and U. S. Navy tie up in "Navy Father of the Year" contest.

How organized groups can help you sell your product

Your public relations program can be sparked by working out projects in cooperation with civic, farm, religious, veteran and other organizations. But, says this expert, you must visualize your product in terms of broad trends in contemporary society.

by David Finn

Ruder & Finn, Inc., New York City

or service fills a public need—and it obviously does so or it wouldn't sell—there are probably dozens of organized groups that can help you sell it.

Many companies give such constant attention to direct selling efforts that they overlook the multifold benefits of indirect selling that can be obtained by working with other organizations.

To take advantage of the various organized groups available for your purposes, you must be willing to back an indirect selling effort. Although the results may not be immediate, sizeable sales results can be gained in the long run.

The first step is to find out specifically what is the public service element in your product. Developing a facility to think in these terms (see box, page 100) is one

of the most important lessons to learn in long term public relations programming.

Once this point of view has been developed, you are in a position to seek out areas of mutual interest between your company and organized groups of all kinds. A knack for finding areas of mutual interest is necessary in this type of public relations, for no group can be persuaded to cooperate on a project unless it serves the basic objective of the group. When you work with such a group, you must think of

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A home study course, the first and only one of its type, is being offered by Business Electronics Inc. Designed for people without technical training or experience, it is based on a similar course members of the firm developed and are teaching at a large University.

Students are taught to develop and program electronic systems for business problems such as Payroll, Accounts Receivable, Inventory Control, etc. for a theoretical electronic computer called BEC.

BEC was designed for instructional purposes and includes the best elements of commercially available computers. The knowledge the student gains from BEC can be applied to any computer. "Programming for Business Computers" provides an opportunity for the student to study at home at his own convenience for only a few cents a day.

Free brochures describing the course are available upon request from Business Electronics Inc., Educational Division, 420 Market Street, San Francisco 11, California.

(Circle number 349 for more information)

Hints for organizational tie-ins

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Here are samples of the possible public service elements inherent in some types of products. Recognition of these areas can help you think in terms of mutual interest between your firm and some organized group.

Food	Health, nourishment, underprivileged groups, incorrect diets
Furniture	Industrial arts, contemporary home design, better liv- ing
Office equipment	Work satisfaction, general efficiency, healthy mental job attitudes, personnel turnover
Electronics	Military defense, scientific progress, the promise of the future
Boilers	Safety, efficiency, economy of installation, progress of scientific heating
Miniaturized products	Needs of the jet age, trend towards portable equipment
Precision products	Social progress through man's ability to do things with increasing accuracy
Time-saving products	How Americans can make best use of increased leisure time available today

their broader interests as well as your own.

How to find organized groups

There are literally thousands of major organized groups in this country which offer potential areas of cooperation with private business efforts.

The basic characteristics of these groups are that they have a fairly large membership and that communications to that membership is well organized. The goal of the organization is usually an idealistic one which is highly respected by the public and which therefore gives the group a great deal of prestige in the community.

It may be that the organized group which can be most helpful to you is an obscure one which you have not heard of before. Even so, you will probably find that among those familiar with the group, its prestige is very high.

An example of such out of the way groups are the "Tall Men's Clubs" located all over the country.

These clubs proved to be greatly interested recently in an approach made to them by the manufacturer of large size shoes. Special literature giving fashion advice to the tall men was prepared by the manufacturer and distributed by the clubs to their membership. It enabled the clubs to perform a valuable information service for their members; at the same time it enabled the manufacturer to bring its own name before a large group of potential customers.

For the most part, organized groups fall into definite categories. Some of these categories are:

Religious groups. Each major religious denomination has several organized groups, including the ministry, religious-cultural, and religious-education groups. Many have national headquarters—which can be located by contacting an individual member of any of the groups, such as the minister or a parochial school principal—while some have international headquarters as well.

Veterans groups. There are at least half a dozen individual veterans groups in the United States that have substantial memberships and significant national stature.

Each has its own local chapters, its own newspapers or magazines, and its own individual programs.

Veterans groups have a high degree of loyalty among their membership, and often enjoy a special place of honor in local communities; their chapter officers are often influential men in a community.

Farm groups. Many of these are regional in membership. Some include the farmers themselves, some their wives, and some their teenage children. Also important in this area are agricultural colleges and official state and federal organizations serving farm areas. Most of these organizations are educational in nature, their main purpose being to find ways to help the farmer in his work and in his way of life.

Civic organizations. Practically every civic government function has a national organization affiliated with it. Thus, there is a national organization of mayors, of fire chiefs, of police chiefs, etc. It is often much more effective to work with these national organizations than to contact local officials on an individual basis.

Foundations. These are usually privately sponsored or endowed groups whose purpose it is to further some specific social or cultural ideal. One can be found for almost every interest in our lives: reading, writing, safety, cleanliness, health, exercise, good grooming, etc.

Other categories of groups include fraternal organizations, educational organizations, charitable organizations, women's groups, trade associations, professional groups and military organizations.

Locating some of these groups may sometimes pose a problem. However, in addition to help that you might receive from editors of local newspapers or of business magazines, a listing of some 4,000 groups appears in the Encyclopedia of American Organizations, published by the Gale Research Co. of Detroit.

How to approach groups

Organizations are as anxious to work with you as you are with them. Virtually all organized



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groups have a special man assigned to public relations, part of whose job it is to seek you out and find a way to cooperate with you.

You will find them practical men, who understand that you will not be interested in cooperating with them unless you stand to gain in the long run. But, since they are non-commercial in their outlook, you must show them that you can think in their terms.

You have to be more flexible than they are. For they must operate within the framework of their stated purposes, while you can undertake all kinds of activity so long as your company can ultimately benefit from the project.

There are many different ways in which you can work out cooperative projects with organized groups. Here are a few examples:

Operational assistance. A department store, for example, recently worked out a cooperative project with the Handwriting Foundation to help train store clerks to write more legibly. The store had found that illegible handwriting was a costly affair-wrong orders were being sent to customers, time was being wasted trying to decipher badly written orders, etc. It was to the interest of the Handwriting Foundation to help the store train its employees to write more clearly, since improvement of handwriting is the foundation's main goal.

The fact that the program was worked out in cooperation with an outstanding organization like the Handwriting Foundation helped to impress the store's employees with the importance of the project. It also proved to be publicizable to the general public, so the store gained in its reputation of being well managed, besides improving its efficiency.

Promotional tie-ups. Organized groups have their own promotional programs which offer tie-up possibilities for enterprising commercial companies.

Excellent examples of such tieups are found in the case of charity drives. Often the opening of a motion picture or play is dedicated to a charity, and the proceeds are donated by the producers of the show to the charity.

Another kind of promotional tieup was recently worked out between a manufacturer of plastic model kits of naval ships and the United States Navv. In honor of Fathers' Day, the company decided to pick the Navy Father of the Year in each of a dozen different cities. The Navy devoted its recruiting drive of the month to the promotion, and displayed models made by the manufacturer in recruiting booths all over each city. There was a great deal of radio and television time devoted to the man selected as the Father of the Year in each community, and an opportunity was found to call for recruits from among the audience, as well as to thank the company for sponsoring the project.

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Design from guide book to exhibit co-sponsored by manufacturer and American Federation of Arts.

Awards. These work both waysawards by public service organizations to companies or company representatives, and awards by companies to public heroes identified with organized groups.

The first type of award is the result of meritorious work on the part of a company, and cannot be solicited. The important thing to remember is that when an award is won-whether it is a safety award, or design or engineering award, or public service award-it should be called to the attention of the various publics with which the company is concerned. It should appear, for instance, in company house organs and in annual reports, and certificates should be framed for prominent display in reception rooms or executive offices.

The second type of award can be developed in connection with specific company promotions. Thus, for instance, a manufacturer of surgical dressings recently decided to give awards to fireman heroes all over the country in connection with a special promotion in drugstores. The idea was to emphasize that one has to have one's medicine chest well stocked, to be ready for unforeseen accidents.

The prestige of the fire departments and the colorfulness of the personal stories of the local heroes helped the drug company call attention to its current selling theme.

Reputation-building projects

Implicit in all cooperative projects with organized groups is that some of the prestige of the public groups becomes associated with the commercial company. In a sense, it is like an endorsement of the company by the organized group (though this must also be of a most subtle nature, for the group could never tolerate a direct endorsement of any kind).

An example of this is the case of a manufacturer of doorknobs who sponsored an art exhibition in cooperation with The American Federation of Arts, a national organization to which most art museums of the country belong. To develop the exhibition, the manufacturer commissioned some of the leading sculptors of our day to develop new approaches to door knobs. The results were so dramatic that many of the larger museums which were members of the AFA schedules the exhibition as part of their regular exhibition series. Not only did the visitors to the museum gain an impression of the company as being progressive and highly conscious of good design, but a great deal of local publicity accompanying each exhibition carried this impression even to those who could

Speaking engagements

This, too, works both waysmembers of organized groups can be guest speakers at company events such as sales conventions and plant openings, and company representatives can be invited to speak at important national conferences sponsored by public groups.

In both cases, the main value of



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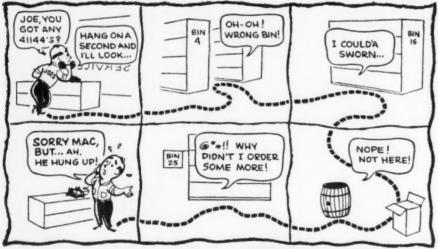
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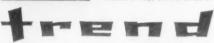
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the speaking engagement is that the association with a national public group brings public attention to the company involved.

Advertising

A tie-up with an organized group often provides valuable material for a company's advertising campaign.

A prominent watch company, for instance, has for years provided all of the timing equipment for the Olympic Games. The advertising campaign of the company has for vears been based on its ability to achieve record-breaking degrees of accuracy and precision-and it mentions the Olympic tie-up as an illustration of its accomplishments.

Caution: tact needed

A great many fine opportunities for cooperative efforts with organized groups have been spoiled by crudeness and indelicateness in the process of discussing details.

I

Each partner in the project-the company and the organizationmust look out for his own interests. He must decide for himself whether the terms of the arrangement can be valuable for his party, but he cannot expect the other party to represent his interests. Commercial tie-ups which destroy the integrity of the organization obviously will be avoided at all costs.

By the same token, it is foolish for a commercial company to go along with a project which cannot be of value to its own interests.

If the cooperative venture can enhance the reputation of the company, if it can draw attention to a sales program which can benefit from publicity, if it can help build an awareness on the part of the public for the type of product the company sells (on the theory that if the industry grows, the firm will keep its share of the market)then the project makes sense.

If these interests cannot be served, the project should not be undertaken. Deciding against such a project should always be done with a polite but full explanation to the organization concerned. The PR man will understand, even though there is no way for him to change the nature of the proposed tie-up. And being frank with each other at that stage will keep the door open for future tie-ups with the same organization. m/m

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PROBLEM SOLVING CLINIC

(Continued from page 35)



If rising sales and distribution costs were placing your firm in an unfavorable competitive position, how would you go about pulling your costs back into line?

"I would have a budget constructed and educate my sales people in budgetary controls. Strangely enough, they like it."

STUART F. SMITH Connecticut General Life

Q. Mr. Smith, if sales costs were rising, how would you go about pulling them into line?

A. Well, you have to do two things at once. The solution to unit distribution costs lies essentially in volume of business, so anything you do must be built around an attempt to increase sales. The first thing I would do, however, would be to have a sales budget constructed. I'd educate my sales people in the use of sales budgetary controls. Strange as it may seem to some people, sales people like budgetary controls.

Q. Salesmen like budgets?

A. Sales managers-branch managers

-can be made to like budgets, particularly when accompanied by incentives. So the second thing I would do would be to apply incentives. There would be incentives for increased sales and other incentives for better cost control. Budgets and incentives together can lower your unit costs. I would make it possible for my sales organization to handle increased sales volume at lower costs. The system would be well understood, manifestly fair. Yes, budgets, rewards, bonuses and penalties-these are very welcome to the better class of sales manager. I'd get my sales costs down in a hurry.

"If you slice the hell out of your distribution costs, you're likely to find yourself in trouble. Our costs are deliberately high."

FREDERICK H. KLEIN Orr & Sembower, Inc.

Q. If your distribution costs were

higher than those of your competitors, what would you consider the most logical approach, Mr. Klein? A. Let me answer that by saying that our distribution costs *are* high—and it's not because we can't control them. In our field, at least, you can get better control over distribution costs than anything else—and certainly better control than over production costs. Yes, our distribution costs are high, and they are deliberately high.

Q. Why is that?

A. We're selling an industrial product and a big part of our sales appeal is that we stand behind the product with service, customer instruction and technical aid. Now, it's always possible to slice the hell out of distribution costs. We could do it. But I think we'd find ourselves in a lot of trouble. I've watched what happens to firms selling industrial products when they try to economize on the over-all costs of distribution.

Q. What happens?

A. Well, they cut down or cut out their advertising. They diminish or cancel completely their responsibility for the product after it leaves their shop. They cut down on service in the field. The only thing they have to offer is a low price. And pretty soon they can't even offer that because their sales diminish and the lower volume means high unit distribution costs again, and back up go the prices.

Q. So you are not particularly concerned that your distribution costs are higher than average.

A. Not if they are not too far out of line. There is a limit, of course. But as long as our costs are higher because we are selling responsibility for our equipment as well as the equipment itself, I know I don't have to worry about losing business.



"I'd get

my costs

down in

a hurry."

SMITH



"Our distribution costs are high—and purposely."

KLEIN

something wrong with your organization.

Q. Have you ever been in this situation?

A. Yes.

Q. What did you find was the problem?

A. Well, very often you find that there are people that you get used to and you accept their performance as being up to par. But when you have a jolt like rising sales costs, you give a more careful analysis and you may discover that these people are not as good as you thought they were.

Q. So you take action in that direction?

A. Yes. It's very easy to accept performance as good, particularly when the man is loyal, hard working, never late, never absent, and so on. There he is, a fine employee, but suddenly comes the jolt and you discover that no matter how good he is in these lines, he just doesn't possess the ability to get to the certain level you need.

Q. Is it sometimes the case that the job is wrong, not the man?

A. Well, yes, and in that case you alter the job or the policies surrounding it. And sometimes training will help.

Q. Will a new incentive help?

A. Not if the old incentive was any good. In other words, if a lot of people are performing under the old incentive, I wouldn't change it because of one man.

Q. Have you ever used any unusual sales incentives programs?

A. Yes, we have tried them all.

Q. With what success?

A. Varying success. We have always come back to the fundamental setting of quotas and giving the man a sliding percentage of incentive pay.

(Continued on page 109)

Q. Extra service, and thus extra cost, is a profitable sales approach in your field, is that right?

A. We've found it so. When your business is to sell equipment that another man uses in his business, local service is tremendously important. When something goes wrong, the customer gets on the phone and he wants help right now. If you let him down a couple of times and hold up his production for two or three days. you'd be surprised how difficult it is to make another sale in that area. All the people in the industry you are selling to there may be competing, but the word about you gets aroundgood or bad. They have their various group meetings where they discuss general industry matters, and if vou've fallen down somewhere as a result of cutting distribution costs, the door is awfully hard to open again.

"Sometimes training will be the answer."

EDWARDS



"When you have a jolt like rising sales costs, you may discover that some people are not as good as you thought they were."

R. Stafford Edwards Edwards Co., Inc.

Q. If excess sales costs were placing you in an unfavorable position with a major competitor, Mr. Edwards, what would you do about it? A. If you know your competitor and his operation well enough, the first thing you would do is to compare your methods of distribution with his. If you find your methods are the same or as good as his, and your costs are still higher, then it's likely there's



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MANAGEMENT METHODS

PROBLEM 4 CLINIC

With most executives spending from 20% to 80% of their time in meetings, there's the problem of keeping meetings fast and efficient, and getting the most value from them. How do you do it?

"One method that helps is for someone to come to the meeting armed with a recommended conclusion to be discussed."

STUART F. SMITH Connecticut General Life

Q. Mr. Smith, about how much of your time do you spend in business meetings?

A. I would say 80%.

Q. Have you discovered any particular technique for making meetings more effective?

A. One method that helps is for someone to come to the meeting armed with a recommended conclusion, or solution to the problem to be discussed.

Q. You feel that is the key to a successful meeting?

A. Yes, that will speed up a meeting faster than anything else. Of course, it must be realized that the preconceived conclusion is subject to debate. This brings up the matter of attitude. You must build a certain attitude to accomplish that. People can't be sensitive about their ideas being chopped up. And the attitude must be such that a man is not discredited because his idea is radically or entirely changed. Neither should total credit be given to the people who change it.

You know, you have counterpunchers in business just as you have counter-punchers in boxing. They are unable to sit down and create a solution to a problem unless they can pick to pieces a suggestion offered by someone else. These people are counter-punchers and they'd be the last people to walk into a meeting with a preliminary idea to offer.

Q. But they have a very valuable function and . . .

A. Yes, they have a very valuable function. They enjoy picking someone else's ideas apart and they do it well. The collective judgment of the group is better as a result.

"Sometimes meetings run too smoothly—when men don't do their own thinking and say only what they think you want to hear."

Frederick H. Klein Orr & Sembower, Inc.

Q. Do meetings in your company run fairly smooth, Mr. Klein?

A. Pretty much so. Sometimes too smoothly.

Q. Too smoothly? Why?

A. Well, first, I think you always have to be careful that you are not getting only what the fellows think you want to hear. Number two, it is sometimes difficult to get subordinates to do their thinking on their own. In some small companies there is a tendency for subordinates to buck their problems up to the top man. Sometimes it's the top man's fault, of course, because he dominates meetings or forces all his own ideas on his people. But even when that's not the case, I think there is a normal tendency for people to buck their problems upstairs. Now, that can be very time consuming and very irritating.

Q. Do you take any particular actions to demonstrate to your people that you want them to do their own thinking, in meetings as well as elsewhere?

A. I use a very simple and direct approach. If I find that someone is trying to get me or someone else to do his thinking for him, I get hold of him and say, "Look here, why haven't

you done something about this yourself? You certainly know a lot more about this than I do. Let me hear some of your ideas!"

Q. Then you think the secret of successful meetings is for the top man to encourage and even force the others to do creative thinking on their own?

A. You're paying people to think. If you can't get them to do it, you're not much of an administrator and you're not getting your money's worth.

"I think a lot of the long-windedness results because meetings are held in emergencies, rather than on a regular schedule."

R. STAFFORD EDWARDS Edwards Co., Inc.

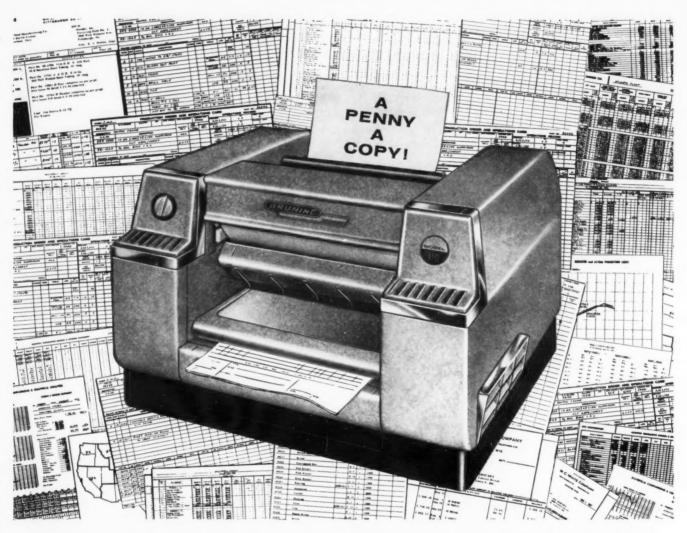
Q. Mr. Edwards, how much of your time do you spend in meetings?

(Continued on page 111)

"Let's hear your ideas!"

KLEIN





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110

MANAGEMENT METHODS

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"Eliciting workers' ideas gets results." TAYLOR

A. A great deal, primarily because we are very strong for committee management here.

Q. What methods have you found for overcoming the problems of committee meets, or for making all meetings more successful?

A. Our answer is to hold meetings regularly. We don't call meetings as an emergency. Every member of a certain group knows there is going to be a meeting at a certain time every Tuesday, for example. As a result, he prepares himself for the business or problems to be covered. I think a lot of the long-windedness and a lot of the argumentative factors in meetings come about because someone has finally been able to get a group together and he never knows when he will be able to get them together again. So he and the group try to cover the waterfront that day.

Q. And you think that regular meetings overcome this?

A. I don't think a committee or any group is worth a thing unless its meetings are set up on a regular basis—a set time on a specific day. It may be once a week or once a month, but it should be on a regular schedule.

Q. Well, do you have the problem of meetings dragging on and on?

A. No, because we know that what we don't cover this week we can cover next week. Most of our meetings are scheduled as luncheon meetings. They begin at noon and seldom go beyond two. We feel we get more into the day by stealing the lunch period.

Q. A common complaint about meetings is that they take five or six men two hours to decide something that one man could decide in two minutes. What is your attitude toward this complaint?

A. Well, I don't think that is true. For one thing, the man who has a tough, knotty problem, instead of having to stew over it and carry the responsibility for solving it alone, brings it into a meeting and five or six men bat it around. The responsi-bility for the solution decided upon is shared. As a result, the man whose problem it ultimately is has the courage to go out from the meeting and act boldly if those in the meeting are standing behind him. Furthermore, meetings-regular meetings-often speed up decisions and actions. If a man is assigned something to do in a meeting this week and he knows he is going to have to report on it at next week's meetings, chances are he's going to get it cleaned up before the next meeting. I think meetings can be so constituted that they serve as a pooling place for ideas without taking proper responsibility away from individual executives-provided they are held regularly.

"Our job is to process recommendations quickly, by taking action, postponing action, or rejecting the proposal with an explanation."

MALCOLM P. TAYLOR Taylor-Reed Corp.

Q. Mr. Taylor, how have you been able to use meetings profitably in your company?

A. We use what we call a "multiple management" system which I believe was fathered by McCormick & Co., Inc. of Baltimore. It's based on the

idea that everyone in our company should have an opportunity to express his thoughts on the over-all operation of the business. It is amazing what we have been able to accomplish by eliciting the thoughts and ideas of our employees through regular meetings.

Q. How does it work?

A. We have what we call a Plant Board, composed of employees in the business. The board elects its own members and is completely free and apart from company control. No management people are represented. The Plant Board meets regularly, every two weeks. The members sit down together to discuss problems affecting any or all departments. Any recommendations that are unanimously made are submitted to a Senior Board, which is made up of our management team. Our job is to process these recommendations quickly, by taking action, postponing action, or rejecting the recommendation with an explanation.

Q. What value do you feel this multiple management technique serves?

A. It provides two benefits. First of all, the Plant Board looks into a number of areas and fills a number of holes that management often does not see. In addition to recommendations directly concerning employees, it has made valuable recommendations on products and production methods. Secondly, it gives everyone an opportunity to share in running our business. There is a regular turnover in the membership of the Plant Board. so that almost everyone serves a term as a member. These Plant Board meetings have been in progress in our company for 17 years and we think they represent one of the best methods we know for tapping the full resources of our people. m/m

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